



Council for Education Policy,
Research and Improvement

Career Education and Development: Preparing Florida's Students for the Knowledge Economy

**DISCUSSION DRAFT
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INTRODUCTION

The Vision

The vision for Florida's system of career education and development is **the creation of a knowledge-based, high skill economy** with a citizenry educated to its maximum potential. Education should provide a foundation for learning throughout each student's life and it must provide the highest level of academic skills that students will need as adults, citizens, and as employers and employees. **The state's economic and social interest are best served by ensuring a well thought out and clearly defined integration between the expertise and experiences provided by the educational system and the various employment needs and opportunities students will encounter.** Achievement of this vision requires the creation of an academic environment that provides the tools for the successful transition of students into college and careers.

The Challenges

A significant percentage of Florida's working age population exit the K-12 system without adequate preparation to enter a career or continue into postsecondary education:

- ❑ For every ten ninth-graders, three do not earn a high school diploma.
- ❑ Of the seven ninth-graders who do graduate, four immediately pursue a college or university education.
- ❑ The remaining six out of every ten ninth-graders exit without a high school diploma or a college/university opportunity.

These problems are projected to grow as the high school age population increases dramatically. The Florida Department of Education estimates that by 2020-21, the number of standard high school diploma graduates is expected to increase to 171,830, up 42 percent from the 2002-03 total of 120,847. Addressing the needs of Florida's "forgotten majority" requires the state to provide students with viable alternatives along their educational paths, so that opportunities for further education, training, and eventually sustainable employment remain open to these students. Florida must remain focused on increasing the proficiency of all students, thus providing them with the necessary tools to make informed decisions on whatever career path they may choose.

The preparation of Florida students for life and for careers requires **high standards** with support at every level to assist students in reaching their highest potential. The production of an excellent workforce for Florida's future requires that all education, workforce and business sectors, public and private, are a part of the solution. The ultimate goal is a seamless education and training system capable of providing Florida citizens, at all stages of their lives, an opportunity to excel and producing the skilled workers necessary for Florida business and industry.

The Goals

Providing a high quality high school education with academic rigor and career relevance is Florida's best opportunity to increase the economic well-being of its citizens and the economic development of the State. Achieving excellence requires a focus on the following long-term outcomes:

- ❑ More students graduating from high school with high levels of academic and career skills.
- ❑ More graduates continuing their education and training in postsecondary institutions, both career-technical and academic programs.
- ❑ More high skill, high wage “knowledge workers” to attract greater economic development to the State.

Achieving These Goals

Achievement of these long-term goals requires additional changes to the existing system to ensure that students now, and in the near future, have the necessary skills and training for a successful transition to a career. The keys to transforming Florida's education system are framed around the following themes:

- I. Building a Foundation for Success – “All Means All”
- II. Career Academies: A Results-Oriented Reform
- III. Skills for Florida's Knowledge Economy

Building a Foundation for Success – “All Means All”

One of the most critical barriers to creating and enhancing the economic development potential of Florida is the deficiency in basic skills among the state's population. **Fundamental skills in reading, writing, and mathematics are a necessary condition for a skilled worker.** Students who do not graduate with these basic skills will face difficulties in finding a job with a living wage and with further education and training.

By assuring that our youth and adult populations have adequate reading, writing, and mathematics skills, we will create the foundation for the acquisition of the education and training required for specific occupations.

Fundamental reform requires higher standards, better support for students, and a restructuring of curriculum. The old paradigm that focused on an ability-based model of student achievement is outmoded for the new economy. The new paradigm must focus on an efforts-based model that emphasizes **higher standards for all students** with an appropriate level of support to ensure that no child really is left behind.

- ❑ **Improvement in the Youth Population** – The first steps to ensuring improvements in basic skills are already underway through recent reforms, like *Florida’s A+ Plan* and *Just Read, Florida!*, but more can be done. Focus must be on research-based reforms and the examination of best practices in other countries/states that have gotten students to high standards.
- ❑ **Improvement in the Adult Population** – Currently students who drop out have very little chance of receiving appropriate training and of acquiring the skills required for sustainable employment. Innovative ideas, such as Danish Production Schools, have the promise of re-engaging these individuals in learning activities that lead to the acquisition of job readiness skills.
- ❑ **Career Planning and Marketing** – Re-branding and marketing require a better awareness of careers on the part of parents and students. Better communication with students and their parents about career choices is needed. Every secondary school in Florida must be educating its students about potential career paths as they progress through their academic careers. While the tools currently provided are valuable, more time and resources are needed to get students on the right track early enough to make a difference in their long-term planning and goals.

Career Academies: A Results-Oriented Reform

Results-oriented reforms are a necessary element in the achievement of the long-term goals outlined above. The establishment of a **Florida Partnership Academy, a results-oriented career academy model**, in every Florida high school would be one key element in this endeavor.

- ❑ **What are Florida Partnership Academies?** – Florida Partnership Academies are **research, standards-based career academies**. The Florida Partnership Academy is a school-within-a school model characterized by: (1) a small learning community; (2) a college-prep curriculum with a career theme; and (3) partnerships with employers, the community, and higher education. Organized around an occupational area, each academy creates a structure in which student learning is linked with potential career options. The Partnership Academy differs from traditional academic and vocational education by **preparing students for both college and career**. The career theme is woven throughout the curriculum with the high standards necessary for admission to a university.
- ❑ **Why Florida Partnership Academies?** – In order to realize the goals to Florida educational excellence, **results-oriented reforms** are needed. Studies have demonstrated that students in partnership academies perform better in high school and are more likely to continue into postsecondary education, compared to similar students in the same schools. Additional benefits attributed to partnership academies are improvements in: attendance, retention, credits earned toward graduation, grade point average, graduate rates, college application rates, and college completion rates.
- ❑ **Accountability** – Evaluation of high schools should be expanded to include performance outcomes that are critical indicators of the state’s success in preparing students for the workplace. **The most important catalyst for change is a high-stakes accountability**

process that provides incentives to high schools for improvement in the transition of their students to careers or postsecondary education. This approach has worked well with the current A+ Plan for K-12 education reform. Focusing on results, the current school accountability system should be expanded to include measures, such as career-related outcomes, graduation rates, and the recovery of high school dropouts.

Skills for Florida's Knowledge Economy

A skilled workforce is a primary determinant of the state's ability to respond to the demands of the economy of the 21st century for a knowledge-based workforce. Career and technical education programs are essential in meeting this demand.

Despite this need, funding levels for career and technical education have decreased substantially in recent years. Because of its importance to the current and future economic development of Florida, **a higher priority must be placed on career, technical, and adult education in the budget process** for the state to successfully compete in the global marketplace with a highly skilled workforce. In addition, educational partners must work together to assure that high school students are exiting with the skill needed to transition smoothly into the workforce or into further postsecondary education and training.

- ❑ **The Adequate Supply of "Knowledge Workers"** – The training offered by Florida's postsecondary career and technical education system must be relevant in today's economy and look toward the jobs of the future. **Communication between education and business leaders is vital to the success of local efforts to coordinate education and training with the skills required by employers.** Training requirements for education programs must be in line with current work skills requirements.
- ❑ **Better Coordination of the Career and Technical Education System** – The system must require that local educational institutions **work together** in producing a credentialed workforce rather than competing for students to enroll in their programs. Duplication of services within a local service area should be avoided, but adequate access to training programs is essential, especially for Florida's most disadvantaged citizens.

I. BUILDING A FOUNDATION FOR SUCCESS—“All Means All”

Creating a better connection between academic and work skills requires that students first possess strong basic skills. **Fundamental skills in reading, writing and mathematics are a necessary condition for a skilled worker.** Students who do not graduate with these basic skills will face difficulties in finding a job with a living wage and with further education and training. By assuring that our youth and adult populations have a high level of reading, writing and mathematics skills, we will create the **foundation for the acquisition of the education and training required for specific occupations.** We are faced with a situation today where the first step for many students on the road to occupational training is improving reading and mathematics skills. Many students require remediation at the community college and vocational centers before they can even enter an education and training program. It is much harder to remediate students once they have exited the K-12 system than it is to assure that all students possess basic reading, writing and mathematics prior to high school graduation. With the adoption of the A+ Plan, Florida is on the right path to reform. The performance gains on reading and mathematics demonstrate the success of these efforts.

ISSUE 1: HIGH STANDARDS FOR ALL STUDENTS

POLICY RECOMMENDATION 1

Every student in a Florida high school should graduate with college preparatory curriculum and an area of concentration (i.e., humanities, math/science, career/technical). Each concentration should have the same high academic foundation in reading, mathematics, and writing.

At all stages of development, age appropriate curriculum with an emphasis on career introduction, exploration and planning should be adopted in the public schools. No student should be allowed to leave school without being exposed to the opportunities available to ensure their future success in life and without developing a plan on the education and training required to achieve that success. Students must be made aware of career opportunities early enough to develop a plan by the start of high school. They should have a plan for education and work prior to putting on their caps and gowns on graduation day. And the schools that graduate these students must be evaluated on more than basic reading and writing skills – the career readiness of their students is essential.

Many of Florida graduates do not master the college preparatory curriculum prior to graduation and enrollment in postsecondary education. They are often ill-prepared for postsecondary education, as evidenced by the high percentage of students requiring remediation in college. While 93 percent of state university first-time-in-college students (FTICs) are “ready” in reading, writing and mathematics, only 37 percent of community college FTICs are ready in all three areas. Currently, only about half of Florida’s high school graduates take the preparatory curriculum—a curriculum that assures readiness—for admission to a Florida state university.

POLICY IMPLICATIONS

Fundamental reform requires higher standards, better support for students, and a restructuring of curriculum. **The standards for students should be the same regardless of whether a student is on a college-bound or work-bound path.** The old paradigm that focused on an ability-based model of student achievement is outmoded for the new economy. The new paradigm should focus on an efforts-based model that emphasizes higher standards for all students with an appropriate level of support to ensure that no child really is left behind.

IMPLEMENTATION STRATEGIES

1. The Florida Department of Education should establish new standards for a high school diploma based on the following outcomes:
 - a) Middle grades mathematics curriculum designed to have students mastering Algebra 1 in the 8th grade.
 - b) Phase out all general mathematics courses offered to high school students
 - c) Pursue policies that vertically align the curriculum of students in the middle grades with the high school that will be serving those students, similar to pre-AP vertical alignment efforts of the College Board.
2. Funding and resources should be provided to support teacher professional development in instructional practices that will support high student achievement, integration of academic and technical curricula, and use of “applied academics” that is rigorous but contextual and leads to improved student motivation and conceptual understanding.
3. In partnership with postsecondary educational institutions (particularly community colleges), high schools should identify opportunities for students to include career/technical coursework in their program of study.

ISSUE 2: IMPROVING BASIC SKILLS IN THE YOUTH POPULATION

POLICY RECOMMENDATION 2

Schools and school districts should be responsible for establishing intensive acceleration programs to get students to grade-level reading, writing, and mathematics benchmarks in 5th, 8th, and 12th grade, modeling best practices nationally and internationally.

The K-12 system, particularly the early grades, has the primary role in improving student achievement. The development of a skilled education workforce in Florida must be built on the foundation of a strong K-12 system that provides the basic skills necessary for higher education training and employment. The failure to achieve basic skills early in elementary school leads to

problems with learning and achievement later in school. Research has shown that children who are not proficient readers by the end of the 3rd grade have difficulties throughout the course of their schooling, perform poorly in other subjects, and may never graduate.

The success of the state's efforts to improve achievement is currently tracked through the National Assessment of Education Progress (NAEP) testing process for national comparison and the Florida Comprehensive Assessment Test (FCAT) for state accountability and school grading. Florida must continue to improve the reading, writing, and other academic skills of its K-12 population by maintaining and strengthening reforms that lead to such improvement. The state has made great strides in improving the reading skills of its K-12 population. Since the adoption of the *A+ Plan*, the state's comparative standing on the NAEP has improved. In the 1998 reading assessment of 4th graders, barely half (53 percent) scored at or above the basic achievement level. By the time of the 2003 assessment, 63 percent of 4th graders scored at or above basic achievement. Florida's 4th graders have also improved their mathematics skills, with 76 percent at or above basic achievement in the 2003 assessment, compared to only 55 percent on the 1996 exam. While not as dramatic as the 4th grade improvement, Florida's 8th graders have improved their performance on reading and mathematics as well.

POLICY IMPLICATIONS

The first steps to improving are already underway through recent reforms in Florida. Among the most critical are the funding for literacy skills being provided through the federal *Reading First* grant and state resources provided through *Just Read, Florida!*. The Department of Education received \$50.6 million from the federal government for *Reading First* for 2003-04. The Department of Education awarded 26 Reading Coaches Model Grants in 2003, totaling \$13.4 million. The Governor proposed and the Legislature passed the Middle Schools Reform Act, to increase the rigor of academic instruction in grades six through eight. Almost \$17 million in funding for reading coaches in the lowest performing programs was provided for the 2004-05 fiscal year.

Additional efforts are necessary for the achievement of high standards for all students, particularly for students in later grades with the need for acceleration in reading and mathematics. While scores have improved, in some cases substantially, a large percentage of Florida's third and eighth graders are not performing at grade level on the state assessment. In 2004, 37 percent of third graders (compared to 43 percent in 2001) and 55 percent of eighth graders (compared to 57 percent in 2001) scored below grade level on the FCAT reading test. In the mathematics portion of the 2004 FCAT, 48 percent of third graders (compared to 36 percent in 2001) and 45 percent of eighth grader (compared to 44 percent in 2001) scored below grade level.

Though the state has seen great advances in student achievement, aggressive strategies to accelerate student learning and improve basic skills must still be pursued by the state. Industrialized countries that have undertaken large scale education reform provide a vision for how to achieve high standards for all students. In countries that have gotten students to high standards, the following characteristics are an important part of the reform:

- ❑ Core teachers stay with students for two or more years,
- ❑ Common planning time is allowed for all core teachers,
- ❑ Tutoring is provided on a daily or weekly basis by the same teachers,

- Longer school calendars for students (190 – 210 days) are mandated with similar hours per day.

It is critical to avoid involving students in “more of the same” pedagogy that allowed them to fall behind in the first place. The state must continue to emphasize the use of research-based teaching practices and pedagogies that have been shown to improve student learning and skill acquisition in a particular discipline.

IMPLEMENTATION STRATEGIES

1. Elementary schools should consider adopting teacher assignments that emphasize “looping”, which allows a teacher to remain with the same single-grade class for two or more years.
2. Elementary and secondary schools with after-school and weekend tutoring programs should utilize the same teachers who are providing the core instruction for the students, to ensure continuity with the classroom instruction.
3. Elementary and secondary schools should implement “summer bridge” programs for acceleration of students in reading, writing and mathematics skills, for those who are not meeting or who are marginally meeting the standards.
4. The Legislature should continue to support policies that leverage private resources like those provided through the Partnership to Advanced School Success program and the School District Matching Grants program.
5. School districts should administer college placement tests no later than the 11th grade to evaluate student readiness for college-level work. This will ensure that students planning to attend a community college or university can engage in coursework that will increase the likelihood that they are college-ready by the time of graduation.
6. Teachers should be provided with professional development opportunities to help them learn to implement research-based “best practice” teaching strategies in normal and intensive acceleration educational environments.
7. School administrators should be provided with professional development opportunities to help them learn to lead and manage change within their school organizations.

ISSUE 3: IMPROVING BASIC SKILLS IN THE ADULT POPULATION

POLICY RECOMMENDATION 3

High school dropouts should be recruited into a new “production school” model that provides an avenue to improve education, skills, and income potential through programs that combine intensive contextual reading and mathematics programs with specific job training skills.

POLICY RECOMMENDATION 2 (ALTERNATIVE)

High school dropouts and at-risk high schools students should be served through innovative school district and community college programs that emphasize the acquisition of skills in an environment that combines intensive contextual reading and mathematics programs with specific job training skills.

Despite improvements in the K-12 school population, many Floridians still require assistance in the acquisition of functional literacy and workplace literacy skills. A large segment of Florida’s adult population experience literacy and basic skills deficiencies, with about 20 percent of Florida residents age 25 and older without a high school diploma. It is important to serve the adult and youth populations who have not obtained the necessary skills in elementary and secondary schools. These include immigrants from other countries, migrants from other states, high school dropouts and those who exited the K-12 system with remedial needs. Adult general education programs in Florida currently serve more than 350,000 adults. Programs funded by the state include adult basic education, adult secondary education, GED preparation, vocational preparatory instruction, adult English as a second language, adults with disabilities and workplace readiness skills. Almost two-thirds of those served are enrolled in adult basic education programs, which provide instruction in mathematics, reading, language, and workforce readiness skills below the ninth-grade level.

It is essential that Florida closes the gap between the needs of employers for skilled workers and the supply of qualified residents to fill the need. Florida citizens need opportunities to acquire the skills necessary for lifelong career employment and post secondary education. Currently, dropouts have very little chance of receiving appropriate training and of acquiring the skills required for sustainable employment.

POLICY IMPLICATIONS

About 25,000 9-12th grade students dropout of high school each year, most of whom will never return for a high school or postsecondary credential. Follow-up data on high school dropouts from 1990-91 reveals that 68 percent had achieved no educational credential ten years later and less than ten percent had any postsecondary credential (Florida Education Training and Placement Information Program, 2002). For students who exit K-12 without a diploma, their future wage

earning potential is limited. Ten years following high school graduation, the average full-time wages of Florida public high school graduates exceed those of high school dropouts by 44 percent. In addition, high school dropouts are three times more likely to be incarcerated than high school graduates and six times as likely to be under community supervision (FETPIP, 2001).

Innovative ideas in other industrialized nations have focused on the development of specific job skills while providing accelerated instruction in basic skills. In the early 1980s, Denmark's Ministry of Education embarked on an innovative program to address youth unemployment. With the youth population that lacks a formal education as their targets, Denmark developed production schools which sought to organize a learning environment in which the students acquire both a practical and general education. The program is not preparatory in nature but students may engage in simultaneous enrollment in a traditional basic skills program.

The content of the education programs is based on "learning by doing" with instruction provided in permanent workshops where program participants design and produce real goods and services for society. The primary objective is to sell the products that are manufactured. Income from the products/services sold is used to partially support the school. Examples of production school workshops or subject areas include tourism, textiles, construction/landscaping, carpentry, electronics, among others. Some key characteristics of the program include the lack of fixed, pre-arranged education sequences and continuous admittance and discharge from the program. Ultimately, students are removed from an environment in which they "failed" (i.e., the traditional public school system) and routed to a program that provides an applied environment for skills acquisition.

IMPLEMENTATION STRATEGIES

- 1. The Florida Department of Education should partner with the State Workforce Board to design a program for recent high school dropouts, modeled after the Danish production schools, to provide skills training and a work environment as well as appropriate basic skills acceleration.**
- 2. School districts and community college should be encourage to develop partnerships to serve at-risk high school students and recent dropouts in programs that accelerate reading and mathematics achievement while providing skilled workforce training.**

ISSUE 4: CAREER PLANNING AND MARKETING

POLICY RECOMMENDATION 4

Every student in Florida should be made aware of career options by the start of high school and provided with extensive guidance in order to plan their coursework in accordance with their career aspirations.

A key element to any reform effort on curriculum and structure requires attention to Florida's current system of career planning and advising. Currently the state offers CHOICES and eCHOICES, a program designed to provide the framework for the career planning process. Access to this program is provided to all public schools in the state. In addition, Florida provides Career Resource Network seminars and other support to school districts to enhance their career advising system.

However, meaningful career and academic advice is probably not available to students in ways that make a difference. Based on data available for the 2001-02 school year, the statewide high school counselor to student ratio is 364 to 1. The ratios at some high schools were as high as 500 or 600 to 1. It is impossible for counselors to provide meaningfully direction to such large numbers of students.

The disconnect between high school students' plans and their actual enrollment patterns is striking. Nationally, the percentage of seniors who plan to attend a four year college has increased from 34 percent to more than 50 percent from 1972 to 1992. While aspirations for college are high, many students are not prepared to enter postsecondary education based on the curricular choices that they have made in high school. Many do not have realistic expectations of what it takes to be successful in college and are not aware of all of their options.

POLICY IMPLICATIONS

Re-branding and marketing requires a better awareness of careers on the part of parents and students, provided through a state-sponsored, school-to-career preparation advertising campaign. Every middle and high school in Florida must be educating its students about potential career paths as they progress through their academic careers. While the current tools are valuable, more time and resources are needed to get students on the right track. The appropriate guidance and counseling must be offered early enough to make a difference in their long-term planning and goals.

The following strategies are intended to produce better career planning decisions for students:

IMPLEMENTATION STRATEGIES

1. The Department of Education should identify best practices for an advising system that ensures all students have access to quality time with an academic advisor. Explore the teacher-advisor model in which each teacher advises and monitors the progress of a small number of students.

2. School districts should mandate the development of an education and training plan related to career interests for late middle school and high school students, to be updated along the progression towards graduation.
3. School districts should utilize peer mentoring programs that rely on high achieving school peers and young adults to provide support for secondary students planning their education and careers.
4. The Department of Education, in partnership with the business community, should develop an intensive marketing campaign to attract high school students into postsecondary education programs leading to careers that are of critical need to the State. This campaign should also involve the active marketing of the “partnership academies” that demonstrate the integration of academic and career education.

II. CAREER ACADEMIES: A RESULTS-ORIENTED REFORM

One of the most important challenges Florida faces is ensuring that students in the K-12 system are properly informed and prepared for their future careers. The idea that “the only path for students to follow is the traditional route to a four-year college degree” has become the perceived standard for educational success. But not all students have the desire for or the need for such a college degree. Better academic and career preparation are necessary to ensure the readiness of all students for the workforce. However, in the current environment, many students with different skills and abilities may not be well served. This problem in Florida may be evidenced by high dropout rate and the fact that only 7 out of 10 ninth graders graduate high school within four years. Whether students drop out or are “pushed” out because of the lack of viable alternatives presented to them by the current education environment, these students leave the system generally without any marketable skills, and thus limited job prospects, a situation with profound implications for these students, for the economic development of the state, and significant educational and social costs. The issue of providing a work-related, career-based education must be addressed by improving the transition from secondary to postsecondary to the workplace. A high school degree alone will prove insufficient for long-term success in the workforce.

ISSUE 1: FLORIDA PARTNERSHIP ACADEMIES

POLICY RECOMMENDATION 5

Every high school in Florida should develop a research-based Florida Partnership Academy with the following features: 1) small learning community, 2) strong academics in a career context (with standards-based career-technical coursework), and 3) partnerships with the local business community.

It is imperative that the educational atmosphere promotes rather than hinders the successful transition of students from school to careers. An important structural issue that affects student achievement is the size of the learning community—school size. The Florida Legislature had implemented a statutory revision to limit the size of new educational facilities, allowing for school-within-a-school models to accommodate existing schools with populations that exceeded the new capacity limits. The 2003 Legislature repealed this statute due in large part to the reality of implementing the 2002 voter approved constitutional amendment to reduce class size.

Despite the lack of a statutory mandate, strategies to create a school-within-a-school atmosphere have become more popular as the size of schools has become greater in Florida. Career academies are one such method that has been spreading throughout the country and the state. Currently, about 350 to 400 career academies are operating in the public K-12 system in Florida, although not all academies are organized in the same rigorous manner. The model became more popular in 1994 when the Florida Department of Education was provided funding to start 30 career academies. Since then, school districts have pursued programs without state funding because of the success

demonstrated by the programs. But only a small percentage of the programs in Florida that have a “career academy” label have an effective research-based design.

Career academies are characterized by three basic features: 1) a small learning community, 2) a college-prep curriculum with a career theme, and 3) partnerships with employers, community, and higher education. Students move through the system as a group and receive career-based instruction. Each academy is organized around an occupational area like health professions, travel and tourism, finance, information technology, or construction. This model creates a structure in which the student learning is linked with potential career outcomes, but provides the base knowledge to ensure the success of its students in any number of fields. Career academies differ from traditional academic and vocational education by preparing students for both college and career. Students who are interested in dental hygiene careers may work along side students who are planning to become physicians. The career theme is woven throughout the curriculum with the high standards necessary for admission to a university.

The positive results associated with career academies have been researched thoroughly in recent years. This research has demonstrated that career academies have shown improvement in the following areas: attendance, retention, credits earned toward graduation, grade point average, graduation rates, college application rates, and college completion rates.

POLICY IMPLICATIONS

Creating a system with high achieving students requires attention to the following areas:

- 1) Optimal size and structure of the learning community;
- 2) Alignment of curriculum between middle grades and high school;
- 3) Alignment of academic and career-technical competencies required for graduation and postsecondary education.

Florida must structure its K-12 curricula to prepare students for postsecondary education and full-time employment in the workplace, increase their awareness of basic workplace competencies and skills, and give them a base upon which to build their lifelong learning capabilities.

Developing career academies in every high school provides the bridge from school to careers that is currently lacking. Incentives for the development of career academies, repackaged as “Florida Partnership Academies”, should serve as the catalyst for reform. A research-based “partnership academy” will prepare the next generation of students to enter postsecondary education without the need for remediation and provide them with the opportunity for meaningful exploration of careers. But these programs must be designed in the most effective manner. A “partnership academy” should not be “window dressing” reform, but a real reform effort in which structure, curriculum, and student expectations are transformed into a true integration of academic and career education. According to the Career Academy Support Network (CASN), the primary clearinghouse of career academy resources, the key characteristics require the following structure:

THE MAIN CHARACTERISTICS OF A FLORIDA PARTNERSHIP ACADEMY		
SMALL LEARNING COMMUNITY	STRONG ACADEMICS IN A CAREER CONTEXT	PARTNERSHIPS WITH THE LOCAL BUSINESS COMMUNITY
<ul style="list-style-type: none"> Academy-only classes for 2-4 years Self-selected cross-disciplinary team of teacher-facilitators, with a lead teacher/coordinator Voluntary enrollment, cross-section of students Size limited to maintain personalization (no larger than 250 students) A family-like atmosphere with a motivating, supportive, disciplined instructional tone Core academic academy classes must be in a block, back-to-back schedule Administrator and counselor support Other course and activities outside of academy 	<ul style="list-style-type: none"> Several academic courses per year that meet high school graduation and college requirements Students will take at least several technical college courses on a college campus before they graduate One or more courses per year in a broadly defined career field that lets students explore a full range of career options Contextual, applied, integrated curriculum Common teacher planning time to allow curricular integration Project-based learning that bring together skills across academic and career classes, possibly a school based enterprise College and career planning, articulation 	<ul style="list-style-type: none"> Steering committee to govern academy Locally selected career field with a cadre of employer partners Parental involvement in students' decision to enroll, and in various program activities Business representatives who provide role models, show students career options and paths Field trips/job shadowing to illustrate work environments Mentor, employee volunteers that serve as career-related "big brothers and sisters" Workplace experiences (paid or unpaid internships, community service) in the last year or two Postsecondary institution articulation, concurrent enrollment

While not specifically advocated by the CASN, it is advisable that academy students should consider an option to take several technical college courses on a college campus before they graduate, in the summer, on weekends, or during their senior year.

IMPLEMENTATION STRATEGIES

1. The Florida Department of Education and the State Workforce Board should work in cooperation to create a high level office to oversee the development of "Florida Partnership Academies". This office should be responsible for the coordination of state planning grant awards to high school for the development of a research-based "partnership academy" design. In partnership with local business, the high school should design a rigorous academic curriculum with a career-based focus. The local business community should be responsible for the career-based elements of the program (internships, job shadowing, business lectures and steering committees or boards made up of business partners).

2. The Florida Legislature should adopt statutory language that defines a “Florida Partnership Academy” and provides for a process for certification of career academies that meet the criteria.
3. Planning grants in the amount of \$15,000 should be provided through an RFP competitive process for high schools to develop a research-based “partnership academy.” High schools that currently have a career academy would be eligible to apply and re-design their model to meet the rigorous standards of the research-based model of career academies.
4. Acceleration pipelines for students in the middle grades should be developed to encourage and prepare them for participation in a “partnership academy.” Opportunities should be available for students, who participate in pipeline activities organized as “summer bridge” or weekend programs, to have first choice in career academies. An example of a program would be a partnership between a school district and NASA for a summer science/math preparation program.

ISSUE 2: ACCOUNTABILITY

POLICY RECOMMENDATION 6

The school accountability system should be expanded to encompass outcomes related to the complete integration of career and technical education in the overall education system. Indicators including but not limited to career-related outcomes, measures of student effort, and the recovery of high school dropouts should complement the current accountability assessment measures in order to provide a more complete picture of student achievement.

POLICY RECOMMENDATION 6 (ALTERNATIVE)

High schools should be evaluated and rewarded for improvement on measures relating to the successful transition of students from high school into career and postsecondary education through the use of outcomes like graduation from high school and continuation rate into a district, college or university education program.

To make certain that these improvements continue and others are undertaken, it is imperative that a system of **performance standards** is established for career-based education. The most important catalyst for change is a high-stakes accountability process that provides incentives to schools for

improvement in the transition from school to career for their students. Currently, the application of school grades based on the FCAT has created a culture of accountability that has produced significant improvements in student achievement. With the same level of accountability for career and workforce related outcomes, schools will have the incentive to adopt real reforms, leading to high standards and improved outcomes for its students. Among the strategies for the state to consider are:

IMPLEMENTATION STRATEGIES

- 1. The Department of Education should include multiple measures of performance for use in accountability. Similar to California's Academic Performance Index, measures such as attendance, the lowering of dropout rates, and the percentage of students passing end of course exams may be added to the FCAT scores currently used.**
- 2. The Department of Education should create a career/workforce outcomes feedback report on the postsecondary progression and success of high school students to provide a baseline analysis for which high schools may be evaluated on their success in getting their students ready for college.**
- 3. School districts should develop a set of applied learning standards that lead into more powerful exploration of careers, integrated into high academic standards.**

III. SKILLS FOR FLORIDA'S KNOWLEDGE ECONOMY

A skilled workforce is a primary determinant of the state's ability to respond to the demands of the economy of the 21st century for a knowledge-based workforce. Career and technical education programs are essential in meeting this demand given that **over 60 percent of the projected job growth in Florida through 2010 will be in occupations requiring postsecondary education and training, but not a bachelor's degree.** Additionally, nine of the top ten fastest growing jobs in Florida over this period will require an associate's degree or a postsecondary vocational certificate. Despite these figures, state support for career and technical education has declined dramatically in the past few years. Florida must recognize that career, technical and adult education is critical to the current and future economic development of the state of Florida; therefore a higher priority must be placed on it in the budget process in order for Florida to successfully compete in the global marketplace with a highly skilled workforce.

ISSUE 1: ENSURING ADEQUACY OF "KNOWLEDGE WORKERS"

POLICY RECOMMENDATION 7

All career and technical education programs should ensure that their program completers exit with skills and credentials endorsed by local and/or state industry sectors.

The training offered must be relevant in today's economy and look toward the jobs of the future. Peter Drucker has spoken of how the "next society will be a knowledge society." Education and training efforts must focus on development of programs to fulfill these needs. Creating more high-wage jobs in Florida requires that employers know that there will be skilled workers to fill those jobs.

No one benefits more from an excellent workforce development system than Florida's business community. As the employers of the workers produced by the state's education and training providers, the presence of business and industry leaders in workforce education planning is essential.

Still, business involvement will likely be most successful on a regional level. Local stakeholders have vested interests in producing a qualified workforce for local employers. The communication among these education and business leaders is vital to the success of local efforts to coordinate education and training with the skills required by employers.

POLICY IMPLICATIONS

Public sector vocational-technical centers, community colleges and universities provide most education and training in Florida. The State has made great strides in recent years in focusing the efforts of these institutions in high-wage, high-skill areas. With organizations like the Workforce Estimating Conference, the path to success in this objective has already been laid out.

Local training providers must request business input and local employers must respond to the call for help. Training requirements for education programs must be in line with current work skills requirements. Workforce training efforts and cooperative arrangements, like those provided through pre-apprenticeship programs, charter technical centers and collegiate high schools, are excellent ways to achieve a better-trained workforce.

Without adequate funding, the State will not have the skilled workforce necessary to be competitive in the global marketplace. In recent years, the current funding structure has not provided adequate support for the development of programs that recruit and train high school students and graduates in high demand fields.

IMPLEMENTATION STRATEGIES

1. School districts and chambers of commerce should promote the development of educational partnerships in which high school students graduate with a two year career-technical credential that has been endorsed by local business and industry through programs like charter-technical and collegiate high schools.
2. The Legislature should provide funding and incentives for technical centers and community colleges to offer postsecondary career-technical coursework for high school students in partnership programs.

ISSUE 2: BETTER COORDINATION OF THE CAREER AND TECHNICAL EDUCATION SYSTEM

POLICY RECOMMENDATION 8

Community colleges should develop, within their local service areas, a strategic plan for career and technical training in partnership with area career-technical centers and local industry sectors.

The workforce development system in Florida is decentralized and fragmented with dozens of agencies involved in various components of the system. The populations served through this system are varied, from at-risk youth to unemployed or displaced workers to current workers.

Currently, school districts and community colleges both provide postsecondary career, technical, and adult education programs. Forty-eight of Florida's 67 school districts provide postsecondary adult vocational certificate (PSAV) programs, while 57 school districts provide adult general education. All 28 community colleges offer associate in science (AS) degrees, 25 of the 28 community colleges offer PSAVs, and 18 provide adult general education programs.

Among postsecondary career, technical, and adult education students, more are enrolled in school district programs than community college programs. In 2000-01, about sixty percent of all postsecondary enrollments in this area (557,752 students) were found in school district programs. The bulk of school district enrollments are found in adult education, where eighty-eight percent of adult education students were in school district programs in 2000-01. Community college enrollments are mainly in A.S. degree and continuing workforce education programs.

POLICY IMPLICATIONS

A higher priority must be placed on career and technical education in the budgetary process. Despite the fact that demand for workers with this educational level is out-pacing the supply, funding levels for career and technical education have decreased substantially compared to other educational sectors, in recent years. Though many factors may account for this substantial decrease, the lack of a strong political constituency perpetuates the perception that career and technical education is the forgotten “stepchild” in the budgetary process. **Career and technical education accounts for a very small share (about 5 percent) of the entire education budget.**

It is imperative that the importance of career and technical education to the economic development of the state is recognized and greater attention and resources are placed on such education.

The dual system of delivery for career, technical, and adult education has raised several issues over time, focusing mainly on duplication and access. The system should require that local educational institutions work together in producing a credentialed workforce rather than competing for students to enroll in their programs. Duplication of services within a local service area should not be encouraged, but adequate access to training programs is essential, especially for Florida’s most disadvantaged citizens.

IMPLEMENTATION STRATEGIES

1. In cooperation with local workforce development boards, area chambers of commerce, community colleges, school districts, and area technical centers should conduct a “needs assessment” analysis to determine which training programs are critical to the economic development of their region. These needs assessments should form the basis for a strategic plan for workforce education for the region. These strategic plans should address, at a minimum, the following elements:
 - Articulation agreements between postsecondary vocational and college programs to assure the “seamless” transition of students.
 - Plans for avoiding duplication of high-cost facilities and equipment, either by avoiding program overlap or by sharing resources
 - The development of “career ladders,” with support from local employers, that take students from high school through higher levels of postsecondary training
2. The local strategic plan should include strategies for ensuring adequate access to education and training programs by examining the feasibility of the following:
 - a. Multiple site offerings to reach the most disadvantaged populations,
 - b. Flexible scheduling through weekend and night courses for the working population,

- c. Short-term, accelerated training options, and
 - d. Distance learning, where appropriate.
- 3. To ensure access to training for disadvantaged populations, the Legislature should provide adequate financial aid for enrollment in career and technical education programs and part-time students.
- 4. Districts that develop and implement strategic plans that are effective based upon outcomes established by the accountability process should be eligible for incentive funding.

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