closing the Talent Gap A Busine Perspect A Business Perspective



In Partnership With The



PREFACE

Formed in 1961, the Florida Council of 100 is a private, nonprofit, nonpartisan organization of business leaders, which exists to promote the economic growth of Florida and improve the economic well-being and quality of life of its citizenry. The Council was the first of its kind in the United States, and works in close harmony with the Governor and the state agencies, the Chief Justice, the Legislature, as well as with private organizations, to achieve quality of life improvements for the citizens of Florida.*

Since inception, the Florida Council of 100 has had a vital, ongoing interest in improving Florida's education system, publishing such reports as *Review of the A+ Plan to Improve Education* in 1999, *We Must Do Better!* in 2004, and *Preparing for the Future* in 2006.¹ We have always fervently held that Florida needs a world-class workforce infrastructure if our citizens are to have the career tools they need to compete and prosper in the ever-changing economy of the 21st century.

This report, *Closing the Talent Gap*, is predicated on the fact that continued enhancement and development of Florida's talent is the leading determinant of the state's ability to build a vibrant and innovative economy. Thus, this research is directed toward identifying the key factors for investing public dollars in each stage of the education delivery process in order to deliver the highest dividend to Florida's students and economy. More specifically, *Closing the Talent Gap* recognizes that:

- 1. Although Florida has already made significant progress in each stage of the educational process, there is still much work to be done.
- Both Florida's current and near-term economies must make a priority of investing public dollars to protect such progress, further develop and retain our "best and brightest," and ensure educational access for all of our students. Further, such monies should be leveraged whenever practicable.
- 3. Necessary linkages must be made in education policy to ensure institutions, providers, policymakers, and the general public value education as an investment in the state's future with a real return in positioning Florida's students and workforce to obtain higher-paying jobs.



- 4. Within this report, effective prioritization of funding in order to maximize the state's economic rate of return is the paramount priority, rather than qualitative assessment of individual systems, institutions, or programs. In fact, the alignment of these elements is vital to Florida's success.
- 5. The following 10 principles should drive discussion of all talent-related issues and be a lens through which policies and programs are evaluated and alternatives assessed:
 - Market-determined need: Supply and demand must drive program creation, expansion, and contraction.
 - Access: A person's circumstances (demographic, geographic, economic, or otherwise) must not be a barrier to full participation in the education system.
 - Highest expectations: Performance standards must be established and maintained at the highest levels, nationally and internationally.
 - Accountability: All participants and providers must answer for their performance.
 - Rewarding performance: Superior results merit superior benefits.
 - Cost-effectiveness: Resources must be allocated where they have the greatest impact.
 - Administrative efficiency: Front-line funding must be maximized.
 - Leveraging resources: Private and federal monies must be brought to bear whenever possible.
 - Partnership: Cross-organizational synergies must be fostered, institutionalized, and capitalized.
 - Data-driven decision-making: Objective analysis must drive policy.

^{*} The Florida Council of 100 would like to thank the Florida Chamber of Commerce and the Florida Chamber Foundation for their partnership in developing many of the concepts in *Closing the Talent Gap*.

EXECUTIVE SUMMARY

Florida faces an emerging Talent Gap — an urgent shortage of a resource as basic as food, more valuable than gold, and in higher global demand than oil. This crisis in human capital represents a vast and growing unmet need for a highly skilled and educated workforce — our state's most important resource for driving sustainable economic development and a diversified economy.

In the next two decades, new innovations will be developed to address the world's most pressing environmental, medical, and transportation challenges. The site of those breakthroughs will reap the economic rewards of leadership. But without a thriving base of knowledge workers, that place may not be Florida. The time to build Florida's future workforce is now, and education must be its foundation.

And while predicting the future of such economic development is difficult, one fact is certain. The leading companies and clusters that will emerge over the next 20 years will locate themselves wherever they have access to a top-quality workforce. Unfortunately, Florida today is not leading the race in providing its workers with the professional skills and education they need to compete and succeed in the economy of this new century.

How big is the problem? Consider: Of every 100 Florida students today, only 76 will graduate from high school, only 51 will attend college, and only 32 will earn a baccalaureate degree within six years.² Compounding this, only about half of those earning degrees in the science and math fields identified with the global innovation economy choose to stay in the state more than eight years.³ And the situation will only worsen as many of our state's current class of highly educated professionals near retirement age — we face a changing of the guard with too few replacements.⁴

Simply put, the future of Florida's economy hangs in the balance. Every student requiring remedial training costs Florida businesses an estimated, annual average of \$459 per worker, or more than \$3.5 billion per year, and every high school drop-out loses a quarter of million dollars in direct lifetime earnings and ultimately costs taxpayers up to \$288,000 in direct payments and additional costs of health care, public safety, and other social programs.⁵ Furthermore, every student who doesn't graduate from college costs the state an additional \$6 million in lifetime economic output, and that's staggering when one considers that, to reach the education level of the 10 most productive states within the next two decades, Florida will need 4.5 million adults with baccalaureate degrees (1.3 million more than expected at current attainment rates) and, within five years, will need at least 100,000 more science and technology professionals than we are on track to produce.⁶ In summary, every Floridian pays greatly each time a student slips through our collective educational grasp.

So how do we begin to address this conundrum? To say Florida's talent production system is a complex web of interrelated entities, programs, and goals would be a gross understatement. Fortunately, Workforce Florida, Inc., the state's public-private partnership in charge of overseeing the administration of the state's workforce policy, programs and services, has established a lens through which Florida's talent production system can be described, evaluated, and, ultimately, improved: the "Talent Supply Chain." Currently, Workforce Florida defines that chain as:

A system of resources and infrastructure that prepares people, on a lifelong basis, to advance the needs of enterprises of all scales, sizes and sectors. Like other supply chains, excellence is achieved through customer satisfaction, on-time delivery, reliability, foresight and seamless coordination and process improvement among and between all participants in the chain. In Florida, people are participant-owners in the chain, by exerting their own transformative abilities to learn, apply knowledge and create wealth.⁷

In *Closing the Talent Gap*, we operationalize this definition by describing our vision of Florida's Talent Supply Chain, its key elements, and related issues and recommendations. In graphic terms, here's what it looks like –



ZONE 1: PREKINDERGARTEN EDUCATION

In Zone 1, families with young children (ages birth-5) receive early education services through a multitude of state and federal programs. While the three largest programs are School Readiness, the state's Voluntary Prekindergarten Education (VPK) Program, and Head Start, there are also many others, including unaffiliated private preschools. Many children are also served in informal at-home settings.

Science has proven that the formative years of ages birth-5 are key to children's brain development. Thus, early education of the state's youngest children is paramount – there's a reason why states are preserving prekindergarten funding levels in a time of greatly declining overall revenues. While the Governor's Children and Youth Cabinet addresses high-level policy regarding all types of children's services in the state, from a tactical perspective, responsibility for early education programs in Florida is currently split among multiple state-level entities and local implementing organizations. While agencies are increasingly attempting to coordinate activities, such a configuration results in inefficiencies and, in some cases, inconsistent program direction. We therefore recommend that the state consider replicating the approach piloted in Workforce Development Board Region 3 (Chipola Workforce Board) / Early Learning Coalition of Northwest Florida, in which workforce and early education services co-locate.

Questions have also arisen regarding the cost and comprehensiveness of VPK. As a result, we recommend that the state consider greatly enhancing the quality of the VPK program as quickly as cost-effectively possible based on demonstrated best practices, including requiring postsecondary teaching credentials and provider accreditation; using approved, research-based curricula; and requiring initial and ongoing diagnostic and evaluative assessments for students.

Furthermore, in order to determine the most cost-effective manner with which to make such improvements, the Department of Education should use its upcoming, initial third-grade FCAT assessment of VPK and non-VPK attendees to target areas of need and develop estimates of cost. The state's Agency for Workforce Innovation and/or the Department of Education should also take steps to collect demographic and socioeconomic data regarding VPK participants versus non-participants in order to facilitate program targeting (breadth) and effectiveness (depth). Finally, the Legislature's Office of Program Policy Analysis and Government Accountability should continue its study of ways to improve early education in Florida by benchmarking best practices of other states, especially methods for improving coordination and cooperation among Florida's multiple early education programs in order to better leverage programmatic and funding synergies.

ZONE 2: PRIMARY / SECONDARY EDUCATION

From Zone 1, students move into Zone 2, primarily consisting of students ages 5-18. The primary division includes Kindergarten through 8th grade, and the secondary division includes grades 9-12. In addition to the public school system (including charter schools and career academies), there are several different types of primary/secondary education provider, such as virtual educators, home schooling, and private schools.

This is the only point in the Talent Supply Chain at which the state can mandate participation. Failure in this zone almost assuredly stunts a student's ability to contribute to the economy and to society – at a cost to all Floridians.

In this section, we recommend metrics such as state and national standardized tests scores, high school graduation rates, and remediation costs and note that, while Florida's performance has greatly improved over the past decade, there is still much work to be done.

Therefore, we recommend that the state continue its development of nationally and internationally competitive academic standards (especially regarding science and technology), as well as rigorous assessments to measure learning of those standards. Accordingly, we also suggest that school grading thresholds be raised.

We further recommend that the education system and business community enhance efforts to promote the achievement of at-risk students and the reduction in the need for postsecondary remediation. The state's Differentiated Accountability program, which now helps low-performing students in all schools, should be expanded, and additional steps should be taken to reduce high school drop-outs, including joint acceptance of accountability at the principal, teacher, and student levels; early identification of troubled students before they fall behind; individual or small-group

intervention at the bridge between middle and high school; alternative education vehicles such as career and professional academies and mentoring programs; and the expansion of Opportunity Scholarships.

Next, we focus on the need for quality teaching, a key factor (if not the key factor) in classroom success. We recommend that teacher education programs be strengthened and certification requirements be raised. We also call for more professional development for teachers and more rigorous teacher evaluation methodologies based primarily on student achievement. Finally, we recommend a more market-based approach to teacher compensation under which good teachers are rewarded and low-performing teachers are removed, if they do not improve.

We also recommend that the Class Size amendment be rationalized so that class size is calculated at the school level, with safeguards to prevent any one class from growing too big and that the state continue to explore ways of faithfully implementing the class size requirement without costly new facility construction. One strategy that might help is expanding the use of virtual education, including technology in the classroom.

Finally, we note that the Florida Constitution requires the state to make adequate provision "for a uniform, efficient, safe, secure, and high quality system of free public schools that allows students to obtain a high quality education" and that some have questioned whether this is occurring – whether the state is spending enough money on education. However, determining an appropriate level of funding is an elusive goal. Per student funding levels vary widely among states and even among districts within states, with little observable correlation between spending levels and student achievement. By cost-effectively targeting its resources over the past decade, Florida's education system has developed best practice standards that have received national acclamation and used those standards to significantly raise student achievement.

And, while it is essential that sufficient funding be appropriated to provide high-quality programs and personnel to implement the transformational policies outlined above, the state must recognize that in poor economies, as well as in good, the first and last dollar spent must be based on a clear and articulated strategy to align our educational programs with the future of our students. As new education dollars are available, the threshold question should be, "Where does the public investment provide the greatest student return?" As such, any current or future education funding approach must be both targeted and performance-driven. One size does not fit all when it comes to determining the resource needs of students who vary demographically, economically, geographically, and in ability. Further, from a performance perspective, the state should examine the possibility of converting the Florida Education Finance Program from a solely "seat-time" model to a completion/results-based model.

ZONE 3: POSTSECONDARY EDUCATION

From Zone 2, students will usually move directly into the workforce (Zone 4) or into Zone 3, consisting of postsecondary education. Here resides the Florida College System (consisting of 14 community colleges, 5 colleges, 8 state colleges, and 1 junior college) and, in addition to the State University System, for-profit private institutions, nonprofit private institutions, and virtual delivery mechanisms.

Postsecondary education is the great accelerator of economic growth. As a person's skills increase, so do his or her productivity, economic contribution, and lifetime earnings. Additionally, university R&D produces compounding returns that generate further wealth.

We also recommend performance metrics for this zone, emphasizing outcomes (e.g., increased wages) over inputs (e.g., enrollment). We note that schools' struggles to maintain degree production, graduation rates, and technology commercialization in the face of declining revenues have weakened competitiveness both nationally and internationally.

As a result, we recommend a new paradigm for addressing higher education issues in the state based on three dialectics: Funding vs. Accountability; Tuition vs. Financial Aid; and Institutional Independence vs. Need for Systemic Governance. Based on this rubric, we call for a "New Florida Initiative" that would double funding for the State University System over the next five years, focusing resources in areas vital to Florida's success in the global innovation economy – and demanding concrete results. We further suggest that Florida College System appropriations be better aligned with projected enrollment.

In terms of tuition and financial aid, we emphasize the need to preserve students' access to higher education in the state. Need-based financial assistance must be provided at appropriate levels. Additionally, the Bright Futures program should be transformed into a true merit-based award, rather than an entitlement, with any resulting savings being redirected to need-based aid. Finally, the state should fully fund existing need-based matching grant programs and expand the concept when possible.

We also call on the state to strike a better balance between institutional independence and systemic governance. As a beginning, we recommend resolving the governance lawsuit between the Legislature and the Board of Governors as expeditiously as possible. We further recommend that, replicating a process successful in other states, the Board of Governors, the Legislature, and the Governor's Office enter into a long-term compact regarding State University System funding levels, accountability measures, and spending flexibilities. Such a compact would enable the university system to plan and act with a longer-term focus critical to optimizing performance. Additionally, we suggest that the Board of Governors delegate more authority to the universities, while maintaining approval authority in certain critical areas.

Regarding Florida College System governance, we note that, while regionally-oriented, workforcerelated baccalaureate degree programs provided by Florida Colleges may be ultimately necessary, we strongly urge the Legislature to avoid putting the cart before the horse. The state must clearly delineate how such programs fit into and add to the strategic direction of Florida's higher education system. Additionally, we recommend that the Legislature ensure that governance, funding, and accountability structures and methodologies are developed and implemented, and immediately identify incremental revenue beyond what is necessary to support colleges' core missions, before funding new Florida College baccalaureate degree programs. The Legislature should also consider establishing a market-based tuition differential (similar to that in effect for state universities) for funding colleges' baccalaureate degree programs, as well as explore options for non-state funding. Additionally, the Legislature should specifically define what constitutes the level of "unmet need" required for the establishment of a new Florida College baccalaureate degree program so that there is an objective threshold that is clearly met or unmet. Further, the Board of Governors and the State Board of Education should strongly consider creating a joint advisory board that could help craft such a definition of unmet need as well as facilitate solutions to disputes between colleges and universities regarding the creation of new college baccalaureate degree programs while retaining authority for approval/denial with the State Board of Education.

Finally, we reiterate the need for Florida to generate more postsecondary degree-holders and therefore recommend that the state more precisely estimate the state's future postsecondary capacity needs. Subsequently, all options must be examined for fulfilling that need, including enhancing retention programs, university expansion (such as under the proposed New Florida Initiative), and optimal expansion of Florida College System baccalaureate degree program offerings. We further recommend that detailed consideration also be given to increased use of private colleges and universities and distance/virtual education for degree production. Furthermore, the state should study the mix of degree programs and research activities at Florida's colleges and universities (and within their respective systems) to determine if mission creep has led to a suboptimal and/or non-

cost-effective "division of labor" and whether realignment of some sort could enable the state to better capitalize on economies of scale and institutions' comparative advantages.

ZONE 4: WORKFORCE

Once in the workforce (whether entering from Zone 2 or Zone 3 or while in these zones), individuals will typically be provided on-the-job training, either job-specific or remedial in nature. Beyond "OJT," individuals may often participate in formal "lifelong learning" activities (including career, technical, and professional training and education), either while still in the workforce or between employments. Key providers of formal lifelong learning opportunities include postsecondary institutions, the formal workforce development system (providers including school districts and the Florida College System, often in conjunction with Workforce Florida, Inc.), and virtual offerings from a variety of sources. Finally, Florida's workforce development system provides company-specific Quick Response Training and Incumbent Worker Training in order to promote specific economic development opportunities, as well as curriculum development and training relating to the state's targeted innovation economy industries via Employ Florida Banner Centers.

Zone 4 is where the economic rubber meets the road. Florida's economy cannot thrive without a world-caliber workforce. The excellent education and training of future workforce entrants in Zones 1-3 will help keep vital industry in the state; attract new, cutting-edge businesses to Florida; and accelerate overall economic growth.

Here we suggest applying metrics such as cost to Florida businesses (and associated lost economic output) resulting from leakages from the Talent Supply Chain. Again noting that that the need for remedial education and training is a cost to business and a drag on the economy (est. \$3.5 billion annually), we recommend the annual surveying of Florida businesses in order to more accurately determine the total cost of their provision of such remedial education and training and the nature of that education and training. Further, state policymakers and implementers should regularly and actively engage the business community and other experts in a dialogue regarding current and future business education and training needs and assist program coordinators and providers in Zones 1-4 in designing programs to meet those needs. Finally, the state needs to ensure that appropriate funding is available to enhance and solidify Florida's Talent Supply Chain, including flexible monies for expanding the state's targeted business and industry training and retraining programs.

CONCLUSION

Ultimately, Zones 1 through 4 must be seamlessly interconnected if the state's economy is to thrive. Florida must solidify and enhance its Talent Supply Chain to focus on creating a pool of talent that will help both our existing and future businesses thrive in the global innovation economy. However, rather than piecemeal, regional changes, Florida must embrace "transformational change" – setting clear, tangible educational goals to ensure our supply of talent will meet our state's most pressing demands.

In fact, the business community, itself, can lead the way. Companies require highly skilled graduates to fuel and grow their business, and more and more firms are forming partnerships both formal and informal with educational institutions in all zones. The nexus between the academy, the research laboratory, and the business boardroom has powered hundreds of America's most successful start-ups, and future businesses will emerge and locate wherever they can draw from a thriving talent pool to tackle the world's key challenges.

Thus, as our final recommendation, we call on the state to mandate the creation and implementation of a statewide talent strategic plan that harnesses Florida's existing educational assets and drives

them toward a common goal: training a new generation of knowledge workers for Florida who can keep pace with competitors, both national and international. Driving this strategic plan should be a comprehensive and quantitative assessment of the current and future talent requirements of the state's economy and a methodical examination of all options, public and private, to increase high-quality degree and certification production in the state to meet Florida's short- and long-term needs. Most importantly, proposed strategies must be designed and weighed to provide maximum economic return to the state.

Florida's unique, nationally-renowned Florida K-20 Education Data Warehouse and Florida Education and Training Placement Information Program, which enable the tracking of students throughout the public education system and into the workforce, should be used to provide specific information in support of the strategic planning process. Such databases should be expanded to the maximum extent practicable by state mandate and/or voluntary participation of external education or workforce providers.

The planning process should involve both public and private parties and establish short- and longterm goals and performance metrics so primary actors can plan for the deliverables that will be expected of them. As part of that process, we recommend holding annual joint planning and work summits among public and private, state-level education, economic development, workforce development, and business advocacy organizations to increase seamlessness and efficiency and accelerate performance in the Talent Supply Chain. The Legislature should endorse and codify both the planning process and, by reference, the resulting strategic plan. The strategic plan should be used by the state as a policymaking tool, an estimating tool, and a budgeting tool, with results and indicators being tracked over time.

Put simply, it's time for a comprehensive, coordinated, data-driven mission to guarantee our state's success in the global innovation economy. Floridians deserve nothing less.

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INTRODUCTION

New economic models and rising costs of living are requiring our state to move beyond our traditional low-cost, low-wage structure, toward a diversified and sustainable new world economy built around high-quality, high-wage jobs.

Florida faces an emerging Talent Gap — an urgent shortage of a resource as basic as food, more valuable than gold, and in higher global demand than oil. This crisis in human capital represents a large and growing unmet need for a highly skilled and educated workforce — our state's most important resource for developing a strong, diversified economy and spurring sustainable economic development.

Over the next 20 years, a variety of innovations will be birthed to address the world's most critical scientific, economic, and humanitarian challenges. The site of those breakthroughs will earn the economic rewards of leadership. But without a vibrant supply of knowledge workers, that place may not be Florida. The time to build Florida's future workforce is now, and education must be its foundation.

Predicting the future of such economic development may be difficult, but one fact is certain — the leading companies and clusters that will emerge over the next two decades will locate themselves wherever they can find a top-notch workforce. Unfortunately, Florida is lagging in the race to provide its workers with the professional skills and superior education they need to compete and succeed in the global innovation economy of this new century.

FLORIDA'S CRITICAL RESOURCE SHORTAGE

Education is more important to an individual's economic success than ever before. Within 10 years, nearly nine out of 10 new jobs will require education beyond a high school degree, and this means that credentials in STEM disciplines (science, technology, engineering, and mathematics) will be more important than ever before in fueling job creation.⁸ Workers with skills in these disciplines will win the best jobs – and businesses and communities that have access to such workers will be able to grow.

And yet, Florida is falling far short of the goal line in equipping our young people to achieve prosperity. Of every 100 Florida students today, only 76 will graduate from high school, only 51 will attend college, and only 32 will earn a baccalaureate degree within six years.⁹ Compounding the problem, only about half of those earning degrees in areas identified with the global innovation economy (e.g., engineering, biochemical and chemical sciences, computer and information sciences) choose to stay in the state more than eight years.¹⁰ And the situation will only worsen as many of our state's current class of highly educated professionals near retirement age — we face a changing of the guard with too few replacements.¹¹

Put bluntly, the future of Florida's economy is at stake. Consider: Every student needing remedial training costs Florida businesses a conservatively estimated, annual average of \$459 per worker, or more than \$3.5 billion per year.¹² And that's just the tip of the iceberg.

There are also personal costs:

Every Florida student who drops-out of high school costs themselves more than a quarter of a million dollars in direct lifetime earnings.¹³

And taxpayer costs:

In terms of direct payments and additional costs of health care, public safety, and other social programs, every student who drops-out of high school costs taxpayers up to \$161,000 (had they graduated high school) and up to \$288,000 (had they graduated college) over their lifetime.¹⁴

And macroeconomic costs:

Every Florida student who fails to graduate from college costs the state an additional \$6 million in lifetime economic output.¹⁵ Even to reach the education level of the 10 most productive states in 20 years, Florida will need 4.5 million adults with baccalaureate degrees – 1.3 million more than expected at current attainment rates.¹⁶ And, by 2015, we will need at least 100,000 more STEM professionals than we are on track to produce.¹⁷

In summary, every Floridian pays dearly each time a student slips through our collective educational grasp.

THE FRAMEWORK: TALENT SUPPLY CHAIN

To say Florida's talent production system is a complex web of interrelated entities, programs, and goals would be a gross understatement. Fortunately, Workforce Florida, Inc., the state's publicprivate partnership in charge of overseeing the administration of the state's workforce policy, programs and services, has established a lens through which Florida's talent production system can be described, evaluated, and, ultimately, improved: the "Talent Supply Chain." Currently, Workforce Florida defines that chain as:

A system of resources and infrastructure that prepares people, on a lifelong basis, to advance the needs of enterprises of all scales, sizes and sectors. Like other supply chains, excellence is achieved through customer satisfaction, on-time delivery, reliability, foresight and seamless coordination and process improvement among and between all participants in the chain. In Florida, people are participant-owners in the chain, by exerting their own transformative abilities to learn, apply knowledge and create wealth.¹⁸

Although that definition is a work-in-process, for purposes of this paper we will add the proverbial "meat to the bone" by describing our vision of Florida's Talent Supply Chain, its key elements, and related issues and recommendations. First, the schematic, or "how it works" –

Although each zone will be described in more detail below, in summary – Ideally, students would move through four zones: Zone 1 (Prekindergarten Education); Zone 2 (Primary / Secondary Education); Zone 3 (Postsecondary Education); and Zone 4 (Workforce).



In **Zone 1**, families with young children (ages birth-5) receive early education services through a multitude of state and federal (and often hybrid) programs that provide educational, health, nutritional, social, and therapeutic services to ensure that children are physically, mentally, and emotionally prepared to succeed in school. While the three largest programs are School Readiness, the state's Voluntary Prekindergarten Program, and Head Start, there are also many others, including unaffiliated private preschools. Many children are also served in informal athome settings.

From Zone 1, students move into **Zone 2**, primarily consisting of students ages 5-18. The primary division includes Kindergarten through 8th grade, and the secondary division includes grades 9-12. In addition to the public school system (including charter schools and career academies), there are several different types of primary/secondary provider, such as virtual educators, home schooling, and private schools.

From Zone 2, students will usually move directly into the workforce (Zone 4) or into **Zone 3**, consisting of postsecondary education. Here resides the Florida College System (consisting of 14 community colleges, 5 colleges, 8 state colleges, and 1 junior college) and, in addition to the State University System, for-profit private institutions, nonprofit private institutions, and virtual delivery mechanisms.

Once in **Zone 4**, the workforce (whether entering from Zone 2 or Zone 3 or while in these zones), individuals will typically be provided on-the-job training, either job-specific or remedial in nature. Beyond "OJT," individuals may often participate in formal "lifelong learning" activities, either while still in the workforce or between employments. Key providers of formal lifelong learning opportunities (e.g., career, technical, and professional education) include postsecondary institutions, the formal workforce development system (providers including school districts and the Florida College System, often in conjunction with Workforce Florida), and virtual offerings from a variety of sources. Finally, Florida's workforce development system provides company-specific Quick Response Training and Incumbent Worker Training in order to promote specific economic development opportunities, as well as curriculum development and training relating to the state's targeted innovation economy industries via Employ Florida Banner Centers.

ZONE-BY-ZONE: RELEVANCE, ISSUES, AND RECOMMENDATIONS

Zone 1: Prekindergarten Education

RELEVANCE

Science has proven that the formative years of ages birth-5 are key to children's brain development. Thus, early education is paramount – there's a reason why states are preserving prekindergarten funding levels in a time of greatly declining overall revenues.¹⁹

Key Components

Preschool

- School Readiness: Administered by the state's Agency for Workforce Innovation (AWI) and implemented regionally and locally by 31 early learning coalitions, the program offers qualified parents financial assistance for childcare (typically for 3-4 year-olds) through a variety of services. Childcare services include extended-day, extended-year, and school-age care to support parents in becoming financially self-sufficient. Funded through a mixture of state and federal funds, the program is a state-federal partnership between AWI and the Child Care Bureau of the United States Department of Health and Human Services. AWI provides statewide coordination of the coalitions. For FY 2009-10, a total of \$665 million was appropriated for the program \$139 million of General Revenue and the rest from federal sources (including \$50 million in American Recovery and Reinvestment Act monies).²⁰ The program serves approximately 250,000 children.²¹
- Voluntary Prekindergarten: In 2004, the Legislature created the Voluntary Prekindergarten Education (VPK) Program (constitutionally approved in 2002), which allows a parent to enroll

his or her child in a voluntary, free prekindergarten program offered during the school year or summer before the child (typically 4-years-old) is eligible for admission to kindergarten. Administered by the state's Agency for Workforce Innovation and implemented locally by 31 early learning coalitions via public and private providers, the program must be voluntary, high quality, free, and delivered according to professionally accepted standards established by the Florida Department of Education. Program size has grown rapidly with more than 160,000 students (67% of Florida's 4-year-olds) being served annually at a cost of more than \$360 million – General Revenue except for \$38 million in federal stabilization funds for FY 2009-10.²²

- Head Start: Head Start is a national school readiness program that provides comprehensive education, health, and parent involvement services to children (ages 3-5) from families below the poverty level. The Agency for Workforce Innovation houses the Head Start State Collaborative Office, while local agencies receive program funding from the federal government. More than \$250 million annually is used to serve over 35,000 Florida children.²³ Communities provide a 25% local match.
- Other private providers: Based on data regarding primary and secondary education enrollment, it is estimated that approximately 11% of prekindergarten-aged children attend private preschools unaffiliated with state or federal programs.²⁴
- Other programs: There are numerous other programs in Florida that provide services to children under the age of 5, including the Prekindergarten Disabilities Program administered by the Florida Department of Education for approximately 20,000 developmentally delayed children (ages 3-5); the Early Steps program administered by the Florida Department of Health for approximately 28,000 developmentally delayed children (ages birth-3); the Title I Prekindergarten program administered by the Florida Department of Education for approximately 6,000 economically disadvantaged children (ages 3-5); and general childcare facility (including home-based) licensing and training responsibilities performed by the Department of Children and Families.²⁵

At home

It is estimated that app. 20% of Florida's 4-year-olds receive education and/or care outside of a formal prekindergarten setting.²⁶

KEY METRICS

- Percentage of children ready for kindergarten
- Cost per kindergarten-ready child

How FLORIDA IS PERFORMING

In 2007-08, 54% of Voluntary Prekindergarten (VPK) Program attendees were kindergarten-ready as compared with only 42% of non-VPK attendees.²⁷ That being said, this still means that about half of entering kindergarteners aren't prepared.

Key Issues and Recommendations

Governance

In 2007, Governor Charlie Crist created the Children and Youth Cabinet, which was later codified in law.²⁸ Consisting of 20 members (including the Governor, legislative leaders, Cabinet officials, the Chief Justice of the Supreme Court, and several executive agency heads), the Children and Youth Cabinet is charged with developing a strategic plan to promote collaboration, creativity, increased efficiency, information sharing, and improved service delivery between and within state agencies

and organizations with regard to a wide variety of children's health, education, and legal programs in Florida.²⁹

From a tactical perspective, responsibility for early education programs in Florida is currently split among multiple state-level entities and local implementing organizations, with hundreds of millions of dollars of annual funding streaming in from all levels, including federal. A 2008 report by the Legislature's Office of Program Policy Analysis and Government Accountability (OPPAGA) indicates (based on hundreds of surveys, interviews, and field visits) that, while agencies are increasingly attempting to coordinate activities, such a configuration results in inefficiencies and, in some cases, inconsistent program direction.³⁰

Recommendations:

1.1 In order to gain efficiencies and enhance the effectiveness and seamlessness of the early education delivery system, the state should consider replicating the approach piloted in Workforce Development Board Region 3 (Chipola Workforce Board) / Early Learning Coalition of Northwest Florida, in which workforce and early education services co-locate.

Voluntary Prekindergarten Program Comprehensiveness

Many educators have suggested that, while reaching nearly 70% of four-year-olds, VPK does not meet the constitutional standards of being "high quality" and "delivered according to professionally accepted standards."

- Teacher credentials: Currently, a VPK instructor must hold only a child development credential.³¹ While the Legislature has recommended that instructors have a postsecondary degree in early childhood education or child development (associate's or higher by 2010 and a bachelor's or higher by 2013), that recommendation has not become a mandate.
- **Research-based curricula:** Currently, a provider may select or design its own curriculum subject to certain minimum standards.³² Often, curricula are not comprehensive or research-based.
- Quality-based accreditation: Currently, a provider must only be licensed and meet minimal childcare standards.³³ Accreditation would require the provision of a comprehensive "learning environment," including characteristics such as the aforementioned teacher credentialing and research-based curricula, as well as optimal child-staff ratios and learning resources.
- Assessments: Currently, the kindergarten readiness of students is assessed upon entering kindergarten as opposed to throughout the prekindergarten program as a means of diagnosing strengths and weaknesses and tracking progress.³⁴

Voluntary Prekindergarten Program Cost

At a spending level of \$2,600 per student, Florida ranks 34th out of 36 reporting states (38 total) that provide prekindergarten services, with the national average being \$4,000 per student.³⁵ Further, although VPK attendance is currently projected to level-out at approximately 70% in the next couple of years, program success might incentivize the state to push for even higher attendance rates.³⁶ Finally, most of the aforementioned suggestions for improving program comprehensiveness would be expected to raise program cost.

Recommendations: Leakage at this juncture of the Talent Supply Chain has a cost to the state both in terms of additional services required to educate a child further along the chain and in terms of children permanently lost from the system.

1.2 Thus, the state should consider greatly enhancing the quality of the VPK program as quickly as cost-effectively possible based on demonstrated best practices. This could include requiring that each VPK class have at least one instructor who holds a bachelor's or higher

degree in the field of early childhood education or child development; each VPK provider use an approved, research-based curriculum; all VPK providers be accredited; and each VPK student undergo regular diagnostic and evaluative assessment throughout the academic year.

1.3 In order to determine the most cost-effective manner with which to make such improvements, the Department of Education should use its upcoming, initial third-grade FCAT assessment of VPK and non-VPK attendees to target areas of need and develop estimates of cost.

1.4 Further, little is known about the demographics and socioeconomics of the households of VPK program participants versus non-participants. AWI and/or the Department of Education should therefore take steps to collect such information in order to facilitate program targeting (breadth) and effectiveness (depth), including the establishment of income thresholds like those used in most other states to focus resources on those most in need.

1.5 Finally, OPPAGA should continue its study of ways to improve early education in Florida by benchmarking best practices of other states, especially methods for improving coordination and cooperation among Florida's multiple early education programs in order to better leverage programmatic and funding synergies.

Zone 2: Primary / Secondary Education

RELEVANCE

This is the only point in the Talent Supply Chain at which the state can mandate participation. Failure in this zone almost assuredly stunts a student's ability to contribute to the economy and to society – at a cost to all Floridians.

Key Components

Public School System: About 87% (2.6 million) of school-attending Floridians attend public schools at a cost of approximately \$17.9 billion in FY 2009-10 (app. \$6,900 per full-time student — 49.7% local funding; 45.1% state funding; 5.1% federal stabilization funding).³⁷ In real terms, per-student appropriations have increased 10.5% since 2002.³⁸

Charter schools: Charter schools are public schools (and funded as such) that operate under a performance contract, or a "charter," which frees them from many regulations created for traditional public schools while holding them accountable for academic and financial results. The charter contract between the charter school governing board and the sponsor details the school's mission, program, goals, students served, methods of assessment, and ways to measure success. Charter schools are open to all students residing within the district. However, charter schools may target enrollment based on factors such as age, socioeconomic status, or specific talent. Currently, there are nearly 400 charter schools in the state, serving more than 115,000 students.³⁹

Career academies: Career academies (or "professional" academies) are public high school learning communities that offer a rigorous and relevant curriculum that leads to industry-recognized certification in high demand occupations, a standard high school diploma, and opportunities for high school students to simultaneously earn college credit. Career academies are characterized by three core elements — a small learning community composed of a subset of students within a larger high school; a college preparatory curriculum with a career theme; and

partnerships with the local community, employers, and higher education institutions. (It is also recommended that they adhere to the Career Academy National Standards of Practice.) There are nearly 500 registered career academies in the state, serving almost 70,000 students who were projected to earn approximately 9,000 industry certifications in FY 2008-09.⁴⁰ Schools are awarded bonus funding weights for each industry certification earned (typically capped statewide at \$30 million annually). Studies have shown that career academies often increase overall academic achievement, especially among at-risk students.⁴¹

Virtual education: Virtual education in Florida is typically recognized as being tops in the nation, both in terms of quality and productivity.⁴² As of 2009-10, school districts are required to offer full-time virtual programs under the School District Virtual Instruction Program (VIP) and part-time access to students in certain grade 9-12 drop-out prevention or juvenile justice programs. In general, eligible students include those who attended a public school in the prior year, those who attended certain state-sponsored virtual schools in the prior year, and dependents of certain members of the military. Students are required to master state standards and take the FCAT. To implement the VIP, most school districts are contracting with virtual education providers, typically the Florida Virtual School (FLVS), paying those providers approximately \$4,000 per full-time student, and about \$500 more per student if computer-related equipment is needed.⁴³ However, districts only pay the virtual schools if the student is promoted to the next grade level or completes all necessary credits.

Affecting only about 2,000 students, though, the VIP represents only a fraction of FLVS's new enrollees. FLVS is expecting to serve up to 190,000 students in 2009-10, an increase of about 60,000.⁴⁴ Many FLVS students participate on a part-time basis, attending traditional bricks-and-mortar schools while taking one or more virtual courses (ranging from general to honors/Advanced Placement classes, as well as classes in subject matters as diverse as foreign languages, art, health, business, and computer science) which they need to graduate on time or they can't fit into their normal course load. Funded by the state as a public school district, FLVS was appropriated \$115 million for FY 2009-10, an expected 10% decrease in per-student dollars.⁴⁵

Home schooling: About 61,000 Florida school-aged children (2%) are home-schooled. Many participate in virtual education.⁴⁶

Private schools: About 11% (320,000) of school-attending Florida children are attendees.⁴⁷ Economic conditions have recently pushed a significant, but still relatively small number of private-school attendees into the public school system.⁴⁸

Key Metrics

- For both at-risk and not-at-risk students:
 - Percentage of students scoring at or above grade-level on the Florida Comprehensive Assessment Test (FCAT)
 - · Florida performance on the National Assessment of Educational Progress (NAEP)
 - High school graduation rate
 - Remediation rate and cost, public and private sectors
 - · Industry-recognized certification credentials in targeted occupations
- Total cost per graduate

How FLORIDA IS PERFORMING

Although detail can be found in Appendix A, in general:

- FCAT scores are improving as students who entered the system under the A+ accountability plan (e.g., FCAT, school grading) progress through the system. However, reading scores appear to decline materially in later grades. Although still significant, achievement gaps between at-risk and not-at-risk students are narrowing.
- NAEP scores are improving longitudinally and relative to the nation as students who entered the system under the A+ accountability plan progress through the system. Although still significant, achievement gaps between at-risk and not-at-risk students are similarly narrowing.
- Based on the new, nationally-recognized National Governors Association Compact graduation rate, which includes standard and special diplomas but excludes GEDs, Florida's high school graduation rate reached a record level in 2008-09, having increased from 69.7% in 2004-05 to 76.3% in 2008-09.
- While remediation rates appear to be declining among Florida high school students pursuing higher education in the state, in 2007 more than a third of those students required remediation in at least one subject. Total inflation-adjusted remediation costs have remained fairly stable, with nominal costs being approximately \$144 million in 2007-08 (59% paid from state funds and 37% from tuition/fees).

Key Issues and Recommendations

Standards

Put simply, rigorous standards are the foundation for a successful education. Currently, Florida is engaged in a 48-state ("Common Core") effort led by the National Governors Association and the Council of Chief State School Officers to establish common, rigorous academic standards in math and language arts and, later, in other subjects, as well. (For a full initiative description, see Appendix B.) Florida is also engaging in a collaborative effort with Massachusetts (which is generally thought to have the toughest standards in the nation) to share and develop enhanced standards and assessments.

Recommendations:

2.1 If, in fact, the Common Core State Standards Initiative is deemed successful by the Florida Department of Education, the Legislature should move quickly to adopt the standards. If, however, the initiative falls apart or the Department does not deem it to be a complete success, the Department should move quickly to adopt the highest academic standards in the country or, even, the world.

2.2 Additionally, high school graduation standards must be aligned with college and careerreadiness standards. Such standards must include (1) real-world application of science, technology, engineering, and mathematics ("STEM") principles, and (2) the knowledge necessary for students to thrive in the global innovation economy, including the "21st Century" skills of critical thinking and writing, problem-solving, research, out-of-the-box thinking, and team-building. To achieve this, both the business community and every postsecondary partner must communicate effectively with the secondary system to ensure necessary skills are being learned by students. Further, depending on the amount of time it will take to implement such improved standards via the Common Core State Standards Initiative or collaboration with Massachusetts, the Legislature should consider implementing the recommendations of the American Diploma Project, including adding geometry, biology, chemistry, and Algebra II to high school graduation course requirements.⁴⁹

2.3 Finally, the state should permit Algebra I to fulfill the current No Child Left Behind 10th grade comprehensive math requirement.

Assessments

Rigorous standards, of course, are meaningless without accurate assessments.

Recommendations: The state should improve its assessments in the following ways: **2.4** Florida Comprehensive Assessment Test (FCAT)

2.4.1 Raise the bar on grade 10 FCAT cut scores for high school graduation. Right now, students must achieve a level 2 (below grade level) on grade 10 reading and math tests in order to receive a diploma. If we raise the cut score to grade level, we will reduce remediation costs at the postsecondary level.

2.4.2 Move FCAT to an online, end-of-year assessment. This will save funds and eliminate the argument that teachers do not get enough time to teach prior to the administration of the FCAT. Further, if we move to using an adaptive test (i.e., subsequent questions change based upon student's correct/incorrect answers), it would eliminate many of the technology barriers to administering a state assessment online by relieving the need for all students to take the test on a computer at the same time.

2.4.3 Continue the process of improving the FCAT based upon and/or in parallel with new assessment adoption based on new standards.

2.4.4 Assess the possibility that differing scoring thresholds are responsible for declines in FCAT reading scores from elementary school through high school. Performance expectations should be uniformly high throughout elementary and secondary grades with new actions taken to increase performance (e.g., more reading coaches), if necessary.

2.4.5 Raise FCAT writing performance expectations. Currently, proficiency scores range from 77% in high school to 90% in middle school, with NAEP results concurring.

2.5 End-of-course exams: End-of-course exams test what has been taught and directly gauge a student's learning in a given class. Ten states use such exams as a graduation requirement, and 22 states use similar exit exams for that purpose.⁵⁰ Currently, Florida is developing a few end-of-course exams in areas such as science (e.g., biology), but the current plan is to develop such exams for 9-12 key subjects. The cost to develop each exam is about \$1.5 million, and it is such cost that dissuaded the 2009 Legislature from moving forward in that area.⁵¹ This year, the Legislature should appropriate \$20 million in nonrecurring funds (and recurring funds for implementation) to get the job done.

2.6 National and international benchmarking:

2.6.1 Florida must be able to compare its students with those of other states, if not other countries. Thus, the state should benchmark national and international standards in its new assessments.

2.6.2 The hope is that common assessments will naturally evolve from the common standards initiative described above. In fact, as part of the Race to the Top initiative, the U.S. Secretary of Education has committed to set aside \$350 million to help states develop common assessments as a result of the new common standards. Rather than using all multiple-choice questions, these new assessments would have to test students' broader "21st Century Skills," such as writing, problem-solving, and creativity. Barring this effort, Florida could also explore joining some of the smaller consortiums of states that are partnering with the private sector to create new assessments.

School Accountability

Ultimately, schools must be held accountable for the progressive achievement of their students.

Recommendations:

2.7 The state should raise the bar on elementary and middle school grades. The 2009 results reveal that more than 86% of elementary schools are high-performing, earning an A or B. We need to raise the points required to be an "A" school from 525/800 (65%) to a higher threshold. The Legislature should also consider creating an automatic "trigger" for raising school grade thresholds (e.g., when 80% of elementary schools are earning "A's" or "B's," the number of points needed to be an "A" school would increase by 10% unless the State Board of Education intervenes to lower standards).

2.8 Further, the state should modify the school grading formula to reward schools for exceptional performance in other areas, such as performance by students scoring above the proficiency level on the FCAT, performance by students performing above the proficiency level in subjects other than math and language arts, and the percentage of students who complete Algebra I, Geometry, or other high school courses before they enter high school.

2.9 Finally, beginning with the 2009-10 school year, the new school grading formula rewards student participation and performance in accelerated coursework programs (e.g., Advanced Placement, International Baccalaureate, Dual Enrollment, Advance International Certificate of Education, Industry Certification) which help prepare students for the rigors of postsecondary education and employment. However, the participation component of the school-grading formula is scheduled to be weighted more heavily than the performance component until the 2011-12 school year. While participation in accelerated programs is important, the effects of increased participation without corresponding improvement in performance should be studied by the state and, if appropriate, the scheduled equalization of the participation and performance school-grading components be expedited and/or the balance between components shifted more toward net performance.⁵² The state should also consider weighting performance in STEM-related accelerated courses more heavily.

Achievement of At-risk Students

As a corollary to the prior issue, schools must be held accountable for the progressive achievement of <u>all</u> their students. In 2009, the state made great strides in this area by aligning its differentiated accountability policy with federal requirements, thus ensuring that not only Title I schools receive special intervention, but all schools who have at-risk students.⁵³ More, however, can be done.

Recommendations:

2.10 Expand differentiated accountability: The Legislature should endorse, and implement unilaterally when possible, the Florida Department of Education's federal "Race to the Top" proposal to:

2.10.1 Expand differentiated accountability direct support from the lowest of 5% of schools to the lowest 5-15%, as well as throughout feeder patterns.

2.10.2 Provide tools and capacity for schools and districts to turn-around low-performing schools, including building district-level capacity to provide support to struggling feeder patterns.

2.10.3 Provide districts with viable options for external turn-around support.

2.10.4 Identify and support districts with persistently struggling schools.

2.11 Reduce high school drop-outs: It is true that the drop-out problem disproportionately affects low-income, minority, urban, single-parent children and that a sub-optimal home

environment is a major contributing factor.⁵⁴ However, our school system has custody of its students for at least 6 hours each day, and it is thus incumbent on the system to find ways to overcome external obstacles and graduate at-risk students. Simply put, if Florida considers dropping-out to be a socioeconomic inevitability for which there is no cure, there simply won't be enough capable graduates in the state's talent pipeline to fuel the future economy. While there's no silver bullet, various strategies are starting to yield results, at least at the pilot level, including:

2.11.1 Joint acceptance of accountability at the principal, teacher, and student levels.

2.11.2 Early identification of troubled students before they fall behind and the use of individualized education plans to guide, track, and inform progress.

2.11.3 Individual or small-group intervention at the bridge between middle and high school (e.g., freshman academies) which appear to have promise, and alternative education vehicles (e.g., career and professional academies, mentoring programs) which are being used to engage otherwise at-risk youth.

2.12 Expand Opportunity Scholarships: Before being declared unconstitutional in 2006 (*Bush v. Holmes*), the Opportunity Scholarship Program allowed parents to choose a higherperforming school of their choice if their children attended, or were assigned to attend, a failing public school. The issue before the Florida Supreme Court was whether the State of Florida was prohibited from expending public funds via the Opportunity Scholarship Program to allow students to obtain a private school education in kindergarten through grade twelve, as an alternative to a public school education. The Supreme Court ruled that portion of the Opportunity Scholarship Program to be unconstitutional as a violation of Article IX, section 1(a) of the Florida Constitution because it allowed some children to receive a publicly funded education through an alternative system of private schools that are not subject to the uniformity requirements of the public school system. However, the Supreme Court did not invalidate the portion of the Opportunity Scholarship Program which allows parents of children in failing public schools to place their children in an alternate satisfactory performing public school.

2.12.1 The Legislature should attempt to amend the Constitution on the 2010 or 2012 ballot (by joint resolution) in order to overcome *Bush v. Holmes*, not only to reestablish the Opportunity Scholarship Program but also to protect other programs that help at-risk students but that might be construed as "non-uniform," such as the McKay Scholarships for Students with Disabilities Program, charter schools, magnet and lab schools, and even certain virtual education programs.

2.12.2 Given the cost-effectiveness of the Corporate Income Tax Credit Scholarship Program which enables corporations to fund scholarships for needy children in exchange for tax credits, the state should consider raising the program's annual tax credit cap.⁵⁵

Remediation

Remediation of Florida's high school graduates attending public postsecondary institutions is costly to both the state and the individual to the tune of over \$144 million annually. Although remediation is a funding issue especially for the Florida College System in Zone 3, its roots lie in Zone 2.

Recommendations:

2.13 As described above, strengthen standards, assessments, school accountability, and intervention policies regarding at-risk students.

2.14 Continue efforts to fully implement the remediation-related provisions of Senate Bill 1908 (2008), which mandates early identification of student remediation needs in high school using assessments that align college readiness standards with high school accountability

requirements and the meeting of those needs before graduation to the maximum extent practicable.

Effective Teaching

An effective teacher is one of the most critical factors to classroom success.⁵⁶ Research shows that the most effective teachers produce student gains almost four times greater than the least effective teachers and that a good teacher can move a student up at least four percentiles within one year.⁵⁷ However, data from the Florida Department of Education shows, for example, that in 2005-06, 30% of elementary teachers, 47% of middle school teachers, and 85% of high school teachers had more than half of their students post declines in reading scores; and 36% of elementary teachers, 43% of middle school teachers, and 35% of high school teachers had more than half of their students post declines in reading such results, current law makes improving or removing non-performing teachers extremely difficult, if not impossible. After three consecutive years of adequate service under annual contracts, school districts are required by state law to enter into a lifetime contract with teachers, otherwise known as tenure. Under the law, tenure becomes a "right," making it next to impossible to take away.

Recommendations: Florida should do all it can to prepare, attract, and retain high-quality teachers, including attracting the highest performing students to the teaching profession, raising professional standards, retaining the best teachers, and making it easier to remove teachers who fail to show student growth. In order to accomplish these goals, Florida should enact legislation or rules, as necessary, to accomplish the following:

2.15 Education and certification:

2.15.1 Review the quality of the teacher graduates in our state-approved teacher preparation programs.⁵⁹

2.15.2 Review the quality and relevance of the programs in Florida's schools of education.

2.15.3 Remove the option for an institution to waive the admission requirements for 10% of a program's candidates for an initial teacher preparation program.

2.15.4 Require the Department of Education to analyze and provide data to all teacher preparation program providers on their completers' student performance for purposes of continued program approval and annual reporting.

2.15.5 Set high content knowledge competency standards required for certification. Ensure that the examinations required for certification assess the necessary depth of content knowledge needed to teach each subject and include an assessment of the individual's ability to diagnose and remediate learning difficulties in the content area.

2.15.6 Require teachers who hold a temporary certificate to pass the subject area test of the Florida Teacher Certification Examination in the first year of employment.

2.15.7 Require the Legislature's Office of Program Policy Analysis and Government Accountability to study and report on the cost effectiveness of alternative teacher certification programs in the state as well as national and international alternative certification best practices that Florida's public and/or private sectors should adopt.

2.16 Professional development:

2.16.1 Require quality professional development, aligned with the new standards, for all teachers.

2.16.2 Undertake, during the first year, a high-quality professional development program

including on-the-job training, mentoring, one-on-one support, and professional instruction so that new teachers can learn their profession.

2.17 Evaluation:

2.17.1 Require that the Department of Education officially adopt and implement measures of teacher effectiveness which are primarily based on student performance. As part of this evaluative process (and the evaluation of teacher preparation programs), the Department should use the Florida K-20 Education Data Warehouse to match individual students' performance with their corresponding teachers.⁶⁰ The Department should ensure that teacher evaluation measures are meaningful and useful to districts for purposes of making teacher recruitment, assignment, evaluation, retention, and compensation policies and decisions. These measures should also be aligned to similar measures appropriate for candidates in teacher preparation programs so that the system, focused on student learning, is in full alignment.

2.17.2 Require that first-year teachers receive a formative evaluation in addition to the currently-required annual summative evaluation.

2.18 Compensation:

2.18.1 Enforce the differentiated pay law.

2.18.2 Change the salary schedule from input-driven to market-driven. Making seniority the driving force to teacher compensation does not assure high-quality. A merit pay system must be practical, based on stakeholder input, and advance student achievement and attainment.

2.19 Tenure:

2.19.1 Eliminate tenure or reform tenure by making it extremely rigorous to achieve, based primarily on student performance.

2.19.2 Perform a district-by-district and school-by-school identification of teachers in need of improvement or removal.

2.19.3 Make it easier to remove non-performing teachers.

2.19.4 Provide authority to superintendents to remove teachers at lower-performing schools (e.g., differentiated accountability categories of "Correct II" and "Intervene").

2.19.5 Remove non-performing teachers from the system instead of just transferring them to another school. There should be zero tolerance and no justification for allowing any non-performing teacher to teach any child in any school in Florida.

2.19.6 Eliminate seniority as the determinative factor in deciding which teachers to surplus at a school as a result of a reduction in allocation.

Class Size

For the most part, the education community and the public appear to be happy with the compromise of calculating class size at the school level rather than at the classroom level. With appropriate accountability standards at the school level, this would allow those closest to the students and the community to make the most efficient use of funding and would eliminate the byproduct of moving students between classrooms for the purpose of meeting arbitrary thresholds. However, the Florida Constitution provides that, in 2010-11 and thereafter, the maximum class size must be calculated at the classroom level.

Recommendations:

2.20 The Legislature should pass a joint resolution amending the Constitution to require that

class size be calculated at the school level, with safeguards to prevent any one class from growing too big.

2.21 Further, the state should continue to explore ways of faithfully implementing the class size requirement without costly new facility construction.

Virtual Education and Educational Technology

Virtual education has shown to be a cost-effective means of educational delivery, which, if implemented fully, provides students greatly expanded access to high-quality subject matter and instruction.⁶¹ Furthermore, a world-class education in the 21st Century requires that our students be in classrooms equipped with the latest 21st Century technology and that students and teachers be trained to use the technology. It also requires that our system of education be modernized to include the use of the latest technology in its pedagogy. With the use of technology, our students and teachers should be able to access and incorporate into their curricula, presentations by lecturers and scholars from throughout the world, as an enhancement to the classroom experience. Finally, business technology has advanced to the point that it could be used by the education system to enable the efficient creation, use, and monitoring of individualized education plans for students. If properly implemented, such an approach could help inform and guide students as well as help teachers and administrators ensure that students' performance is optimized.

Recommendations:

2.22 The state should continue to pursue the best means to incorporate technology and its use in our children's education, both inside and outside of the physical classroom, including with regard to conducting academic performance assessments.

2.23 Further, use of virtual instruction, both inside and outside of the classroom, should be formally recognized by the state as a primary education delivery vehicle and funded accordingly. Access to the broadest array possible of quality courses and instructors (including geographically – district, state, national, and international – and across Talent Supply Chain zones) should be afforded to Florida's students in the most efficient way possible.

2.24 Recognizing that postsecondary education and workforce training are increasingly leveraging new instructional technologies, by 2011 all Florida high school students should be permitted and enabled to apply at least one virtual education course toward graduation requirements. Additionally, to further enhance and empower students' capabilities for lifelong learning, by 2015 Florida high school students should be required to pass at least one virtual education course before graduation.

2.25 Finally, the state should assess the costs and benefits of using technology to create, use, and monitor individualized education plans.

School Funding

The Florida Constitution requires the state to make adequate provision "for a uniform, efficient, safe, secure, and high quality system of free public schools that allows students to obtain a high quality education." Some have questioned whether this is occurring – whether the state is spending enough money on education.

Determining an appropriate level of funding is an elusive goal. Per-student funding levels vary widely among states and even among districts within states, with little observable correlation between spending levels and student achievement.⁶² In fact, benchmarking Florida based on perstudent funding is not very useful in understanding whether Florida is fulfilling its constitutional mandate. There are many states that spend more per student than Florida and yet have students who perform no better, or even worse, than Florida students on national exams.⁶³ As shown in Appendix A, by cost-effectively targeting its resources over the past decade, Florida's education system has developed best practice standards that have received national acclamation and used those standards to significantly raise student achievement.

Recommendations:

2.26 It is essential that sufficient funding be appropriated to provide high-quality programs and personnel to implement the transformational policies described above. While past achievements must be recognized, an optimal funding methodology must drive continuous improvement by supporting a vision and strategy that provide Florida's students with the very best tools for developing their own and Florida's future. Vital to that strategy is the recognition that in poor economies, as well as in good, the first and last dollar spent should be based on a clear and articulated strategy to align our educational programs with the future of our students. As new education dollars are available, the threshold question should be, "Where does the public investment provide the greatest student return?"

2.27 As such, any current or future education funding approach must be both targeted and performance-driven.

2.27.1 One size does not fit all when it comes to determining the resource needs of students who vary demographically, economically, geographically, and in ability.

2.27.2 Further, from a performance perspective, the state should examine the possibility of converting the Florida Education Finance Program (FEFP – the complex methodology used to allocate K-12 education funding among school districts) from a solely "seat-time" model to a completion/results-based model.⁶⁴

Zone 3: Postsecondary Education

RELEVANCE

Postsecondary education is the great accelerator of economic growth. As a person's skills increase, so do his or her productivity, economic contribution, and lifetime earnings. Additionally, university R&D produces compounding returns that generate further wealth. In fact, a 2006 study commissioned by the Federal Reserve Bank of Cleveland reviewed 75 years of data from 48 states to determine the long-run determinants of state income growth.⁶⁵ The study found that a state's knowledge stocks—the innovativeness of its firms and the education and training of its workforce—are the three key determinants of its per capita personal income.

Key Components

Florida College System: The Florida College System (formerly known as the community college system) is nationally renowned for its high productivity and efficient transitioning of students to baccalaureate degree programs via the state's acclaimed 2+2 articulation policy.⁶⁶ It is the proverbial workhorse of Florida's education system, providing "access, outreach, responsiveness, quality, affordability, university transfer, and workforce education from career certificates through baccalaureate level programs targeting Florida's economic needs" – and, yes, it does all that.⁶⁷ Consider: the system (consisting of 14 "community" colleges, 5 "colleges," 8 "state" colleges, and 1 "junior" college) serves over 846,000 students via a multitude of programs, including Associate in Arts (32% of students); Associate in Science/Applied Science (9%); Vocational and College Credit Certificates (5%); College and Vocational Prep (16%); Adult and Secondary Education (7%); Continuing Workforce Education (21%); Recreation and Leisure and Life Long Learning (8%); Educator Preparation Institutes (1%); and Bachelor of Science/Applied Science (1%).⁶⁸

The FY 2009-10 budget for the Florida College System is \$1.7 billion, which is an increase of \$43.9 million or 2.6% over the current year when including \$83.3 million in Federal Stabilization Funds and \$49.6 million from an 8% tuition increase.⁶⁹ However, in real terms over the past two decades, funding per full-time student has declined by about 8%, with median tuition and fees (app. \$2,000) currently being \$400 below the national average.⁷⁰

State University System: The State University System is composed of 11 universities serving more than 300,000 students.⁷¹ In addition to generating more than 70,000 undergraduate, graduate, and professional degrees annually, the system contributes heavily to the state's economic development through R&D/commercialization activities that, in 2008, resulted in \$1.6 billion in research expenditures, 161 patents, \$360 million in licensing revenues, and agreements with 24 start-up companies.⁷² A 2009 base tuition increase of 8%, coupled with the new "differential tuition" (which will enable universities to increase tuition by a total of 15% annually until it reaches the national average), maintained overall SUS funding at \$3.4 billion.⁷³

Private, nonprofit institutions: The 28 accredited independent colleges and universities of Florida (180 sites statewide) produce one-third of all postsecondary degrees in the state (including a quarter of all baccalaureate degrees, nearly 40% of all graduate degrees, and more than half of first professional degrees), with more than half of the schools' bachelor's degrees awarded in fields such as education, health care, engineering, computer science, and biological/biomedical science.⁷⁴ Roughly one-third of students at these institutions come from families with incomes less than \$60,000, and about one-quarter of the 125,000 enrolled students receive public tuition aid through the Florida Resident Access Grant (FRAG) Program (app. \$2,500 per student in 2009).⁷⁵

Private, for-profit institutions: Widely spread throughout the state, Florida's accredited career colleges and schools include nearly 900 licensed, private institutions serving more than 300,000 students and annually producing more than 95,000 graduates in over 200 occupations.⁷⁶ While two-thirds of students are enrolled in 300+ degree-granting institutions (AS, BS, MS, PhD), the remainder are enrolled in 550+ non-degree granting institutions (diplomas, certificates, industry certifications).⁷⁷ Private, for-profit institutions generate a significant portion of the state's information technology and computer science credentials, health and allied health science credentials, business and business management credentials, and legal professional support credentials.⁷⁸ Approximately 5,000 students enrolled in private, for-profit institutions receive public tuition aid through the Access to Better Learning and Education (ABLE) Program (app. \$1,000 per student in 2009), which enables the schools to meet certain matching requirements.⁷⁹

Virtual / Distance education: As in Zone 2 (primary / secondary education), virtual/distance education is increasingly becoming a viable alternative for postsecondary students seeking to complete entire or portions of degree programs without having to move or travel extensively to remote institutions. Florida already has at least 7,000 distance-education-only degree-seeking students (and 113,000 undergraduate students enrolled in online courses) in the State University System, as well as thousands more attending other public and private postsecondary institutions.⁸⁰

KEY METRICS

Although specific performance indicator suggestions can be found in Appendix C, any such accountability system should embody the following principles:

- While it should consist of related input, output, outcome, and efficiency indicators, the focus should be on outcome measures, which are often used to inform funding decisions.
- Indicators should be relevant and valid. While emphasis should be placed on the two main goals of teaching students and advancing research, it is important to do so in the context of

spurring Florida's economy.

- Indicators should be transparent and easy for the public to understand since it is the public's will that often drives change. To this end, the accountability system should consist of approximately 15-20 indicators.
- While indicating areas for improvement, the accountability system should afford systems and their institutions maximum flexibility in developing and implementing means for such improvement.
- The accountability system should measure returns on investments and track improvements and alignment between Florida's higher education system and the state's short- and longrange economic development focus.
- At the least, indicators should provide data that is reliably comparable over time. Whenever
 possible, Florida performance should be compared with that of peer states, the nation as a
 whole, and other countries.

How Florida Is Performing

Although detail can be found in Appendix A regarding the performance of the multiple components of Zone 3, and not all metrics suggested in this report are currently used, as illustration:

- Inputs: For the State University System, education revenues per student have decreased 9.4% in real terms since 2000.⁸¹ Further, as noted above, in real terms over the past two decades, funding per full-time student in the Florida College System has declined by about 8%.
- Outputs: Notwithstanding the declining inputs, for the State University System, degree production is increasing, with nearly one-third of degrees being awarded in the critical-need areas of health and education, science and engineering, and in other emerging technology fields.⁸² About 20% more feed into other targeted high-wage/high-demand occupations.⁸³ Research expenditures also continue to increase, albeit slightly. The number of degrees and certificates awarded by the Florida College System has also been increasing, with the percentage of degrees awarded to minority students rising 14% since 2003-04 and the FCS producing two-thirds of the state's nursing degrees.⁸⁴ The number of degrees generated by private, nonprofit institutions has similarly been increasing (including in critical-need areas such as nursing, education, and health care), with more than a third being awarded to minorities.⁸⁵ Private, for-profit institutions are also awarding an increasing number of baccalaureate degrees and significant percentages of the state's credentials in key sectors, such as information technology, computer science, and health care.⁸⁶
- Efficiency measures: Over the past few years, six-year first-time-in-college graduation and retention rates have been fairly stable for Florida institutions. Based on the only available nationally comparative data (which excludes transfers, students who attend part-time during their first fall semester, and other students who enter or exit under "extraordinary" circumstances), the State University System is graduating its students at a rate just above the overall national average (app. 57%) and the national average for minorities (app. 51%), while private, nonprofit institutions are right about at the national average, as well.⁸⁷ (Overall graduation rate data for private, for-profit institutions is unavailable because students aren't tracked by cohort.)⁸⁸ It is important to note that graduation rates can be affected by factors such as systemic or institutional mission and student demographics. State University System indirect cost expenditure rates are holding steady.⁸⁹
- Outcomes: Measurement of suggested outcomes is still not the strength of many postsecondary systems and institutions, although the Florida Education and Training Placement Information Program (FETPIP) is used to track certain graduate wage data. However, it can

be said that, overall, Florida universities do not fare particularly well with regard to national peer assessment ratings and rankings, probably in large part due to the effects of declining inputs.⁹⁰ Patenting, licensing, and technology commercialization activity is declining.⁹¹

Key Issues and Recommendations

A New Paradigm for Addressing Higher Education

As became clear during recent Florida Chamber Foundation and Florida Council of 100 meetings with business and education leaders around the state, one of the enemies of higher education reform is plain, old, simple communication. The world of higher education is very complicated, and everyone is always trying to make it simple. In this sound bite world, things get dumbed-down, and that is a huge risk. It is irresponsible to discuss Bright Futures and not recognize that it is integrally tied to tuition levels, just as it is irresponsible to talk about individual university authority versus the Board of Governors without acknowledging that our colleges and universities are part of a system and have to be treated that way. How do we have the conversation in a thoughtful way but at the same time keep from getting overwhelmed by the intricacies, nuances, and interdependencies of our system of higher education?

Recommendations:

3.1 We propose a new analytical framework under which all the relevant issues that need to be dealt with can be looked at as three continuums: Funding versus Accountability; Tuition versus Financial Aid; and Institutional Independence versus Need for Systemic Governance. If you think of these as three sets of tugs and pulls, and acknowledge that there is balance necessary in each, the conversation gets slightly less simple but more effective and still understandable.

- ✓ Funding vs. Accountability: Funding has at least two real elements that must be considered one is absolute dollars available in any year and the other is accountability. Until policymakers believe that postsecondary systems and institutions are really accountable and are spending their existing budgets responsibly, new dollars are going to be very hard to obtain. Colleges and universities may object and scream "unfair," but the simple truth is that the system is viewed as inefficient and layered and bureaucratic, and, until that perception is changed, either with facts that prove it wrong or real changes that point to a new direction, new funding is going to be hard to come by. It is the elephant in the room that no one likes to talk about it, but it is typically at the root of much of the dysfunctional conversation that universities and legislatures have.
- ✓ Tuition vs. Financial Aid: The second set of bookends deals with tuition versus aid. This is the one that gets dumbed down the most and is, in some ways, the most complicated. It involves math and big numbers and lots of imbedded programs so it lends itself to selective picking at and broad generalizations — and thus false conclusions. It is impossible to talk about any of the four major elements that make up this subject (tuition, need-based aid, Prepaid Tuition, and Bright Futures) in isolation. For example, doing something with Bright Futures without dealing with need-based aid is never going to fly politically.
- ✓ Institutional Independence vs. Need for Systemic Governance: It is far too simple-minded to just put your foot down and say individual institutions' boards of trustees and the Legislature need to run and fund each college and university and that they know best. It is also equally simple-minded to say that all things have to be decided based on a centralized view. The fact is that this is the ultimate negotiation, but it has to be done based on some principles that everyone can agree on. Further, leadership in such a reform effort must come not only from our elected officials, but from affected parties

(e.g., business, educators), as well. It requires a vision that describes what excellence means and describes what success looks like. Once we know that, then we can create the political formula that admits it will take time and that compromise is essential, but compromise within a framework of that bold vision.

Funding and Accountability

Put simply, if Florida's higher education system expects increased funding, it must convince lawmakers that it can and will use those monies efficiently while generating outcomes that will drive the state's innovation economy. (See Appendix C for suggested performance metrics.)

- State University System: Since 2000, the state has reduced support for students by nearly half a billion dollars and is facing a fiscal crisis that might force even deeper cuts over the next few years.⁹² What do these cuts mean?
 - Tougher admissions and reduced access. Schools are having to turn away many transfer students, Bright Futures recipients, and others who would have easily been admitted in prior years.⁹³ In fact, a report by ENLACE Florida, a foundation that studies the state's higher education system, predicts that as many as 60,000 Florida students could get shut out of state universities during the next few years if enrollment caps remain in place.⁹⁴
 - A 20-year low in funding per student. Controlling for inflation, Florida spends \$4,500 less per university student than it did in 1989.⁹⁵ The decline comes while neighboring states have boosted per-student dollars by 3%.⁹⁶
 - A "brain drain," where other states are poaching some of our best faculty and researchers.⁹⁷
 These states are enticing Florida educators to leave our state, taking their private research
 dollars with them, and this brain drain is producing a dangerous exodus of higher education
 talent and funding from Florida. And, it doesn't help that Florida ranks 7th among the 10
 biggest states in pay for full-time faculty members.⁹⁸
 - More crowded classes and more teaching by part-time instructors and graduate students.⁹⁹
 Florida now ranks 50th in the nation in student-faculty ratio and last in the number of tenured or tenure-seeking professors per student.¹⁰⁰
 Further, students can expect fewer choices for majors and classes if the associated program or center is still there.
 - And what do you get when classes get bigger and fewer and it's harder to find faculty? Simply put, stagnating graduation and retention rates and longer graduation times.¹⁰¹
 - Add all of this together, and it's no wonder that the overall prestige of Florida's university system isn't as high as it should be. In fact, only two SUS schools score in the top tier of the U.S. News and World Report rankings (University of Florida, 47th, and Florida State University, 102nd).¹⁰²

In November 2008 and after consultation with the Florida Chamber of Commerce and the Florida Council of 100, Governor Charlie Crist unveiled a proposal for reforming the State University System. Under the plan, the board of trustees of each university would have the option to establish, with Board of Governors approval, a differential tuition higher than the base rate charged to undergraduates. The amount of the tuition differential could vary by university, by college, or even by degree program. However, the differential could not exceed 15% each year, with tuition ultimately being capped at the national average, thus resulting in a possible \$1.5 billion in cumulative additional revenue by 2015 or 2016 when that ceiling is reached. Although base tuition could continue to be covered by Bright Futures, the extra differential tuition would not. The tuition changes would not affect families that have already purchased Florida Prepaid College Plan contracts. Also, 30% of the differential tuition revenues would go toward need-based student aid. The remainder would be used for faculty recruitment and retention and programs to improve

graduation and retention rates and other areas identified by universities. This proposal ultimately passed the Legislature during the 2009 Regular Session and was signed into law by the Governor.¹⁰³ The additional revenue generated by the new tuition differential in the first year is expected to help universities maintain a status quo budget in FY 2009-10, in spite of the state's overall fiscal difficulties. No doubt, it's a bold, courageous first step by the Governor and the Legislature. But that's what it is – a first step.

Recommendations:

3.2 Enact a "New Florida Initiative": Florida's economy has historically been driven by three main factors: the tourism industry, the agriculture industry, and rapid population growth. While the first two drivers will continue to be key economic pillars, rapid population growth will not. As such, a new third pillar is needed to augment the state's high-wage job structure: a knowledge-based economy that promotes "STEM," or science, technology, engineering, and mathematics. The State University System needs to be a key, if not the key, driver of this transformation by turning Florida into a magnet for researchers and industry needing an educated populous.

3.2.1 Thus, we propose doubling funding for the SUS over the next five years by combining planned tuition increases with a one-time infusion of \$1.75 billion over the next five years. The approach would include:

3.2.1.1 Allowing each university to fulfill its own unique mission, including a mix of research and degree production.

3.2.1.2 In the first 5 years, distributing funding to universities by a simple formula based on percentage of FTEs in the SUS, percentage of General Revenue in the SUS allocation, and percentage of General Revenue in the SUS allocation including Special Units. Subsequently, university performance would primarily drive the funding formula.

3.2.1.3 Focusing at least half of the new funding in specific STEM degree programs, with the remainder being used to enhance the general pool of degreed citizens with creative and analytical thinking skills and to develop a related pool of graduates with degrees needed for regional development (education, business, nursing, computing, etc.).

3.2.1.4 Allowing new funding to be used both for operations and for capital construction, such as building laboratories, classrooms, and required office space.

3.2.1.5 In return, the SUS would commit to enhancing its accountability system with metrics such as those suggested in Appendix C, as well as setting bold new performance targets, such as:

- In 5 years, awarding 25,000 additional degrees annually; adding 2,000 2,500 faculty to bring down an additional \$500 million annually in new research funding; and generating an additional 100 new patents, 10 additional start-up businesses, and \$20 million in new licensing revenue annually.
- In 20 years, awarding 50,000 additional degrees annually; raising an additional \$1.5 billion annually in new research funding; and generating an additional 250 new patents, 20 additional start-up businesses, and \$50 million in new licensing revenue annually.

3.3 Fund State Matching Grant Programs: Over the past two decades, state matching grant programs have raised more than \$1.4 billion in private funding for higher education facility construction, instruction programs, and research and development activities.¹⁰⁴ However, there is currently \$334 million in private higher education donations (university and Florida

College) waiting to be matched by the state.¹⁰⁵ Although this is not the first time the state has stopped paying into the matching programs, it is extremely damaging, nonetheless, and risks losing and/or deterring private contributions needed to enhance our institutions. We therefore recommend that the state fully fund the higher education operating challenge grant programs and the higher education facility enhancement challenge grant programs in order to completely leverage private-sector donations to Florida's higher education system.

 Florida College System: The state appropriates funding, including tuition, to the Florida College System based on prior-year enrollment estimates. This results in severe courseavailability problems, greatly limiting access, when current year enrollment rises significantly (as it is now due to the downturn in the economy) and excess funding when the opposite occurs.

Recommendations:

3.4 Change the appropriations process to properly align funding with cost drivers.

Tuition and Financial Aid

It's one thing to increase tuition. It's another to keep college affordable and accessible in spite of those increases. Section 1009.93, Florida Statutes, states that "state student financial aid be provided primarily on the basis of financial need," and, while the aforementioned 2009 tuitiondifferential legislation dedicates 30% of the revenues generated to providing need-based financial aid, this statutory intent is not being met, primarily due to Bright Futures. Florida's largest financial aid program is now spending more than \$400 million on assistance that doesn't consider students' ability to pay and that disproportionately goes to non-minority students.¹⁰⁶ That's three times what the state spends on the need-based Florida Student Assistance Grant Program and why Florida ranks 38th in the country in terms of providing need-based financial aid.¹⁰⁷

Recommendations:

3.5 The state needs a balanced approach to financial aid. The truly meritorious students need to be rewarded and incentivized to attend state institutions. Those truly in need should receive need-based aid, a mix of grants and loans, taking advantage of federal monies first, whenever possible. The bottom-line is, though, that, if Florida wants to increase postsecondary accessibility, it must step up to the plate with significantly more need-based assistance. For example:

3.5.1 Bright Futures: Bright Futures is where reform must start, with savings being redirected to need-based aid. Close to half of all undergraduates at Florida's 11 public universities receive Bright Futures scholarships.¹⁰⁸ This year, an estimated 183,000 scholarships are expected to be distributed, a more than four-fold increase from the number handed out when Bright Futures began in 1998.¹⁰⁹ The cost of the scholarship also has climbed over the past decade, from \$70 million when it was launched to \$419 million this year.¹¹⁰ Further, lottery revenue, the source of Bright Futures funding, is stagnating, even as the number of qualifying students increases.¹¹¹

Simply put, Bright Futures was conceived to retain the best and brightest in Florida, with the hope that they'd eventually join the state's workforce, adding to the state's prosperity. However, as tuition paid by in-state students often has not been raised because the Legislature has to fund Bright Futures, low tuition (less than half the national average) and low public funding (not including political earmark projects) have resulted in a grossly underfunded higher education system.

Thus, the 2009 Legislature took three historic steps toward rationalizing the size and use of Bright Futures. First, Bright Futures dollars will not cover the 8% base tuition increase for FY 2009-10. Second, Bright Futures dollars will not cover any increase in tuition stemming
from the 2009 tuition differential legislation. Third, the authority for paying additional Bright Futures college-related expenses for Academic Scholars has been deleted.

3.5.1.1 The Legislature's base-tuition decision should be codified in law and the Bright Futures program be permanently decoupled from tuition increases.

Bright Futures is supposed to be a merit-based financial assistance program. However, nearly half of undergraduates receive Bright Futures dollars – that's entitlement, not merit. Bright Futures should be a "MERIT" program, not a "merit" program, rewarding only Florida's best and brightest and doing so regardless of need. Currently, using GPA eligibility requirements, more than 90% of students meet the required score (3.0) for Medallion scholars (75% scholarship prior to 2009 funding changes), and nearly two-thirds of students meet the required score (3.5) for Academic scholars (100% scholarship prior to 2009 funding changes).¹¹² In addition, the 970 SAT threshold under the Medallion program is actually less than the national average (1016 in 2009).

3.5.1.2 Bright Futures eligibility thresholds should be increased so that they truly reflect above-average merit. As noted above, savings should be redirected toward need-based aid.

3.5.1.3 Further, receipt of a Bright Futures award should be tied, eventually, to the meeting of college-ready diploma standards.

Sometimes valuable Bright Futures dollars are used in inefficient ways, such as for class retakes, dropped classes, or classes unrelated to a student's degree program. Such wastefulness penalizes the majority of students who use their awards wisely and efficiently. In part, the 2009 Legislature addressed these inefficiencies by (1) requiring postsecondary institutions participating in the Bright Futures program to refund to the Department of Education any funds received for courses a student dropped or withdrew from after the end of the drop-add period, and (2) doubling the number of semester hours full-time students would have to complete in an academic year for renewal eligibility from 12 to 24. Further efficiencies could still be gained, though.

3.5.1.4 Payments for taking the same class more than once should be eliminated.

3.5.1.5 Additionally, payments for credit hours unnecessary for a student's degree program should be eliminated.

The nation as a whole is not producing enough graduates in the STEM fields to keep pace with other countries, and the same is true in Florida.¹¹³ Florida has only 64% of its expected share of the nation's scientists and 74% of its engineers.¹¹⁴ Why? In part, it is because Florida ranks 45th in the nation in the percentage of baccalaureate degrees awarded in STEM fields by public universities (17%) and 25th in the nation in the percentage of graduate degrees awarded in STEM fields (20%).¹¹⁵ Compounding the problem, only about half of those earning degrees in STEM disciplines choose to stay in the state more than eight years.¹¹⁶ Thus, within five years, Florida will need at least 100,000 more science and technology professionals than we are on track to produce.¹¹⁷ As a result, at recent hearings conducted by the Florida Chamber Foundation and the Florida Council of 100 around the state, the prospect of offering tuition breaks, enhanced financial aid, or other incentives for students in math, science, engineering, and technology programs was proposed. The approach could help drive students into specialty areas needed to meet new workforce demands, thus supporting the New Florida Initiative, described above.

3.5.1.6 Full-value Bright Futures awards should be limited to students pursuing STEM-related degrees which are so valuable to the state's economy.

A recent Board of Governors report found that Florida students are likely missing out on more than \$24 million in "free" money for college.¹¹⁸ About 22,000 students attending public universities in 2005 likely qualified for federal Pell Grants but did not apply — that's more than 10% of all undergraduates in Florida. The students who missed out on Pell Grants may have also missed out on millions of dollars in other grants because most federal and state need-based programs require students to fill out the Free Application for Federal Student Aid (FAFSA). These findings reinforce the findings of a 2003 OPPAGA report showing that, while about a third of Bright Futures recipients applied for and received federal financial aid, more than half of Bright Futures recipients did not even bother to apply.¹¹⁹

3.5.1.7 The state should establish policies encouraging schools and students to maximize other grants and scholarships (e.g. Pell) before providing a Bright Futures allocation. Such policies should include a requirement for a student to complete a FAFSA in order to receive a Bright Futures award.

3.5.2 Need-based matching grant programs: In 2009, the Legislature reduced funding for the First Generation Matching Grant Program, which matches private contributions for need-based scholarships for first-in-family college or university attendees, by nearly 15%.¹²⁰ Similar programs, such as the University of Florida's Opportunity Scholarship Program, have demonstrated the efficacy of leveraging private monies to help low-income students afford a college education.¹²¹

3.5.2.1 As a start, funding for the First Generation Matching Grant Program should be restored and enhanced as a means of leveraging private funding for the purpose of making higher education more attainable for many lower-income Floridians.

3.5.2.2 Additionally, the state should study existing need-based matching grant programs, both in and out-of-state and both public and private, in order to find models that can be replicated throughout Florida's higher education system.

Institutional Independence and the Need for Systemic Governance

State University System: Starting in 2003, Florida voters established the Board of Governors to oversee state universities, but the Board of Governors and lawmakers have battled ever since over who controls the setting of tuition. The dispute reached a peak in 2007, when the Board of Governors joined with several prominent political figures and education advocates to file a lawsuit against legislative leaders, claiming the "operation, regulation, control and management of the state university system" rests with the Board of Governors.¹²² The lawsuit was dismissed in January 2008 by Leon Circuit Judge Charles Francis, who found several parties lacked standing to sue. But the complaint was quickly amended, refiled and remains pending. The lawsuit, however, remains a point of contention. At roundtable discussions conducted by the Florida Council of 100 and the Florida Chamber Foundation, many university and college leaders sided with the spirit of the lawsuit and the goal of empowering the Board of Governors. But most speakers also said it would be wise to abandon the legal challenge and seek an accord between the two sides regarding university governance.

Recommendations:

3.6 As the elephant in the room, this lawsuit is hanging over the heads of would-be highereducation reformers and will continue to do so until it is resolved one way or the other. We therefore recommend that the parties either quickly settle the dispute or push for expedited resolution by the Florida Supreme Court.

Still, a consensus of participants in the roundtables agreed that Florida's current university

governance lacks a needed level of authority. As University of North Florida President (and, at the time, SUS President-in-Residence) John Delaney stated, "Somebody's got to be able to put up a stop sign."

Such enhanced authority would not mean Florida is intent on creating a top-down education control system. Rather, it reflects the complicated, often vexing nature of Florida's current governance system. The Board of Governors, the Legislature, and the Governor's Office must be able to adhere to a visionary master plan for higher education in Florida that can reject "end-runs" by politicians or individual colleges and universities seeking to introduce new, potentially counterproductive programs, facilities, or schools of research. Case-in-point: Policymakers have funded three new medical schools since 2001, even though a lack of desirable residency programs sends many of our medical graduates out-of-state – where they stay.¹²³

3.7 As an approach successfully employed in North Carolina and several other states seen as home to productive higher education systems, a "compact" should be created between Florida's university system and its executive and legislative branches of government (potentially as part of the New Florida Initiative, described above). Many within the education community who attended our roundtables said that such an agreement would make it easier to plan, budget, and set long-term standards within the state system.

3.7.1 Under such a compact, the Governor, Legislature, and Board of Governors would outline their intentions for state funding levels, spending flexibility (including lump sum appropriations), and institutional accountability throughout Florida's higher education system. (Thus, it is also possible, if not desirable, that other key components of Zone 3 join such a compact or develop similar compacts.) The introduction of new degree-granting programs at individual universities or such major expansions as law or medical schools also would be included in the compact.

In states where compacts have been used for years (e.g., North Carolina), the agreements typically propose a multi-year plan for enrollment growth, tuition rates, facilities funding, salaries, and other cost increases. Compacts typically are seen as providing a floor, but not a ceiling, for funding. Compacts are not binding and can be adjusted or effectively ignored when state finances come up short. Still, the goals included in these kinds of documents are seen as helping states forge a progressive path in higher education, while requiring colleges and universities to meet performance benchmarks.

Further, accountability elements agreed to by parties to such a compact would likely include a pledge to meet the compact's enrollment objectives and faculty workload policies and to continue to make the highest priority that students have access to the classes they need to graduate in a timely manner. Parties also would likely agree to a variety of student and institutional outcomes, focused on student success and efficient use of resources. (See Appendix C for examples of potential accountability metrics.)

3.7.2 The compact should also provide for the delegation of authority from the Board of Governors to the universities to oversee daily operations and university-level matters, including budgeting, tuition-setting, and growth planning. The Board of Governors would have authority to approve trustees' tuition requests, as well as their requests for curriculum changes, program expansions, and long-term strategic plans.

 Florida College System: When, in January 2009, the State Board of Education endorsed recommendations from the Florida College System Task Force and the State College Pilot Project for expanding the Florida College System to allow for the provision of new baccalaureate degree programs, we suggested freezing funding for such programs until the fiscal and policy ramifications of such a policy change on existing community colleges and universities were more clearly known.¹²⁴ Furthermore, we proposed that certain principles be applied in any expansion of community colleges' baccalaureate degree programs, including:

- Mission preservation. Maintain the historical community college mission. Local workforce and adult education needs must not be sacrificed for any perceived glamour attached to housing baccalaureate degree programs. Florida's community colleges are nationally acclaimed for serving their communities, and it must remain so.
- Local control. Maintain control by local boards of trustees. For state colleges to be able to keep fulfilling their local missions, control and focus must also remain local. However, state coordination of the overall Florida College System should remain, especially with regard to state- and/or regionally-driven baccalaureate degree programs.
- 2+2 articulation. Protect and enhance the current 2+2 system of articulation for admission and transfer. The system is the backbone of Florida's higher education system, and weakening it would damage the system's cost-effectiveness.
- One system. Florida has a proven community college system, and we want to preserve its excellence and integrity as the program mix evolves to include baccalaureate degrees.
- One approval process. Transition to a baccalaureate degree granting institution and program approvals should follow the current, rigorous approval process/criteria. Degree approval for each specific baccalaureate degree program ensures that effort and cost is not unnecessarily duplicated and that all institutions are treated fairly, especially if any resources are on the line. As it is now, the approval process for a new baccalaureate degree program must be thorough, with quantitative evidence of the local demand for the degree and how existing supply mechanisms are inadequate. Further, a college requesting a new baccalaureate degree program must clearly delineate the program's impact on the college's current capacity and financial resources and clearly identify the resources needed for the additional program.

In fact, the 2009 Legislature implemented much of this approach.¹²⁵ In addition to putting a relative freeze on new community college baccalaureate degree program appropriations (except for nominal funding to enable specific colleges to use external funds to operate new programs), it enacted Senate Bill 2682 based on the non-fiscally-related recommendations of the Florida College System Task Force and the State College Pilot Project.¹²⁶ (See Appendix D.)

However, although progress has been made in implementing a state college system based on our suggested principles, certain issues remain unresolved. First, despite SB 2682's provision of general requirements for a Florida College's notice of intent to propose a new baccalaureate degree program, disputes have arisen between colleges and between colleges and nearby state universities regarding the definition of program need.¹²⁷ Second, a comprehensive funding methodology protecting core-mission resources has yet to be adopted. Third, the Legislature has not identified new revenues for the funding of new baccalaureate degree programs, which would prevent the cannibalization of funding used for core college programs.

Recommendations:

3.8 While regionally-oriented, workforce-related baccalaureate degree programs provided by Florida Colleges may be ultimately necessary, we strongly urge the Legislature to avoid putting the cart before the horse. The state must clearly delineate how such programs fit into and add to the strategic direction of Florida's higher education system. Additionally, we recommend that the Legislature ensure that governance, funding, and accountability structures and methodologies are developed and implemented, and immediately identify incremental revenue beyond what is necessary to support colleges' core missions, before funding new Florida College baccalaureate degree programs.

3.8.1 The Legislature should also consider establishing a market-based tuition differential (similar to that in effect for state universities) for funding colleges' baccalaureate degree programs, as well as explore options for non-state funding.

3.8.2 Additionally, the Legislature should specifically define what constitutes the level of "unmet need" required for the establishment of a new Florida College baccalaureate degree program so that there is an objective threshold that is clearly met or unmet.

3.8.3 Further, the Board of Governors and the State Board of Education should strongly consider creating a joint advisory board that could help craft such a definition of unmet need as well as facilitate solutions to disputes between colleges and universities regarding the creation of new college baccalaureate degree programs while retaining authority for approval/denial with the State Board of Education.

Capacity Building

As described in the Introduction to this report, there is a need to generate many more Floridians with postsecondary degrees. Currently, Florida ranks 44th in the nation in terms of baccalaureate degree production per 100,000 residents ages 20-44 and, similarly, 34th in advanced degree production and 40th in science and engineering degree production.¹²⁸ (See Appendix A for a breakdown of baccalaureate degree production by type of institution.) Moreover, recent and future population growth (often place-bound for a variety of reasons) will continue to strain the capacity of publicly funded institutions in Zone 3.

Recommendations:

3.9 As described in the Conclusion to this report, the state must more precisely estimate the state's future postsecondary capacity needs. Subsequently, all options must be examined for fulfilling that need, including enhancing retention programs, university expansion (such as under the proposed New Florida Initiative), and optimal expansion of Florida College System baccalaureate degree program offerings.

3.9.1 Detailed consideration should also be given to increased use of private colleges and universities for degree production (since they are readily scalable, geographically diverse, and require relatively little public subsidy), as well as distance/virtual education for many of the same reasons.¹²⁹ Accordingly, the state should consider optimizing use of the FRAG and ABLE financial assistance programs to the extent it decides to utilize private colleges and universities to increase degree production capacity.

3.9.2 Furthermore, the state should study the mix of degree programs and research activities at Florida's colleges and universities (and within their respective systems) to determine if mission creep has led to a suboptimal and/or non-cost-effective "division of labor" and whether realignment of some sort could enable the state to better capitalize on economies of scale and institutions' comparative advantages to increase degree production.

Zone 4: Workforce

RELEVANCE

With individuals entering from Zones 2 and 3, Zone 4 is where the economic rubber meets the road. Florida's economy cannot thrive without a world-caliber workforce. The excellent education and training of future workforce entrants in Zones 1-3 will help keep vital industry in Florida; bring new, innovative businesses to the state; and accelerate overall economic growth.

Key Components

Florida's Workforce: Florida is home to more than 600,000 business establishments, currently employing more than 6.5 million Floridians.¹³⁰ In addition, the state's public sector employs an additional 1.1 million workers.¹³¹ In all, Florida's economy generated a 2008 Gross Domestic Product of \$744 billion (making it the 4th largest economy in the nation and the 20th largest economy in the world) and total 2008 personal income of \$716 billion.¹³²

Workforce Development System: Although Florida has a comprehensive workforce development system composed of numerous interrelated entities, programs, and funding streams, the emphasis here in Zone 4 is the system's provision of a multitude of lifelong learning opportunities (including career, technical, and professional training and education) to both employed and unemployed Floridians, as well as targeted business/industry training through programs such as Quick Response Training, Incumbent Worker Training, and Employ Florida Banner Centers.¹³³ Such education and training are provided by a variety of public entities (primarily local school districts and Florida Colleges), as well as private colleges and universities and often overlap in scope with programs residing in Zones 2 and 3.¹³⁴ (See Appendix A.) State-level coordinating entities include the Agency for Workforce Innovation; Workforce Florida, Inc.; and the Department of Education.

- Ouick Response Training: Facilitated by state and local economic-development and workforce-development organizations and administered by Workforce Florida, QRT is an employer-driven training program designed to assist new value-added businesses and provide existing Florida businesses the necessary training for expansion.¹³⁵ A state educational institution assists with application and program development or delivery. The company may use in-house training, outside vendor training programs, or a local educational entity to provide training. This program is customized, flexible, and responsive to individual company needs. QRT requires the company to provide a portion of the training-related funds, either in the form of cash or an in-kind contribution. In FY 2008, QRT was appropriated \$5 million, with which 16 applicants were approved for awards that were used to leverage \$23 million in private training funds, helping to train 2,280 Florida workers.¹³⁶ However, recent state budget difficulties have resulted in program funding being cut by a third.¹³⁷
- Incumbent Worker Training: Facilitated by Enterprise Florida, Inc., the state's principal economic development organization, and administered by Workforce Florida, IWT provides grant funding for the training needs of existing for-profit businesses.¹³⁸ Through this businessed riven program, Florida is able to effectively retain and keep businesses competitive through upgraded skills training for existing full-time employees. The program has been structured to be flexible to meet a business's training objectives. The business may use public, private, or its own in-house training provider, based on the nature of the training. For use in FY 2008, IWT was appropriated \$3.7 million, which it awarded to 145 companies (based on requests of \$6.5 million from 187 companies), leveraging \$25 million in company matching funds to train 8,441 Florida workers.¹³⁹
- Employ Florida Banner Centers: Administered by Workforce Florida, the 12 Employ Florida Banner Centers are a statewide source of cutting-edge training for entry-level and experienced workers who need to upgrade their skills in high-value, innovation economy sectors such as biotechnology, alternative energy, and aviation/aerospace.¹⁴⁰ Each Banner Center is led by a Florida educational institution or organization. Banner Centers partner with industry in targeted sectors to identify training needs and create related curricula than can be shared with other institutions. Since inception in 2006, Banner Centers have used \$4 million in state funding and app. \$10 million in federal funding to develop 51 new curricula and train nearly 3,000 workers.¹⁴¹

Key Metrics

- Cost, direct and opportunity, to Florida businesses related to the provision of remedial education and training, resulting from leakages from the Talent Supply Chain in Zones 1-3
- Lost economic output resulting from the aforementioned business costs
- Jobs created or retained in Florida as a result of targeted training programs, such as QRT, IWT, and Banner Centers

How FLORIDA IS PERFORMING

As noted in the Introduction to this report, every student needing remedial training costs Florida businesses an estimated, annual average of \$459 per worker, or more than \$3.5 billion per year.¹⁴² Furthermore, targeted training programs are promoting economic development in the state, but whether current program subscriptions represent the ceiling or the floor is unclear.

Key Issues and Recommendations

Private-Sector Remedial Education and Training

The need for such remedial education and training is a cost to business and a drag on the economy.

Recommendations:

4.1 Enterprise Florida and/or Workforce Florida should annually survey Florida businesses (representative sampling) to more accurately determine the total cost of their provision of remedial education and training and the nature of that education and training.

4.2 Further, those two entities, as well as state policymakers, should continue to regularly and actively engage the business community and other experts in a discussion regarding current and future business education, training, and retraining needs and assist program coordinators and providers in Zones 1-4 in designing programs to meet those needs.

4.3 Finally, the state needs to ensure that appropriate funding is available to enhance and solidify Florida's Talent Supply Chain.

Targeted Business/Industry Training

When Florida's economic developers attempt to recruit high-skill, high-wage businesses in targeted industries to the state, or help such existing businesses expand in the state, one of the key factors that determine whether a firm chooses Florida or another state for its activities is the availability of a workforce quickly trainable in the firm's line-of-work.¹⁴³ However, annual funding for Florida's key targeted-business training programs (\$7 million) doesn't even come close to that of our competitors, such as Texas which spends \$40 million and Georgia which spends \$50 million.¹⁴⁴ As a result, site selection consultants (who help relocate businesses to "greener pastures") have repeatedly told Florida's economic developers that the state's targeted training programs are "chronically underfunded," especially when it comes to the larger projects – the ones that can really move the needle on the economy through cluster development.¹⁴⁵

Recommendations:

4.4 The Legislature should consider greatly increasing the pool of flexible dollars available to the economic/workforce development system for targeted business and industry training programs.

CONCLUSION

Based on the 10 key principles of market-determined need, access, highest expectations, accountability, rewarding performance, cost-effectiveness, administrative efficiency, leveraging resources, partnership, and data-driven decision-making, Florida must solidify and enhance its Talent Supply Chain to focus on creating a pool of talent that will help both our existing and future businesses thrive in the global innovation economy. However, rather than piecemeal, regional changes, Florida must embrace "transformational change" – setting clear, tangible educational goals to ensure our supply of talent will meet our state's pressing demands. Sooner than later, Florida's four Talent Supply Chain zones must be brought together (by carrot or by stick) to create a cohesive system that coordinates these unique resources to ensure that the Chain has the capability and competence to achieve results.

In fact, the business community, itself, can lead the way. Florida's business community is a champion for renewing our state's education system. Companies require highly skilled graduates to fuel and grow their business, and more and more firms are forming partnerships, formal and informal, with educational institutions in all zones. The nexus between the academy, the research laboratory, and the business boardroom has powered hundreds of America's most successful start-ups, and future businesses will emerge and locate wherever they can draw from a thriving talent pool to tackle the world's key medical, engineering, technological, and environmental challenges. Florida can and should be the site of these innovations – but our prosperity in the future is linked to the skills we foster in our workforce today.

Thus the business community recommends the following as an overarching framework for the ideas in this report:

Recommendations:

5.1 Current education, workforce, and economic development strategic planning activities are splintered among multiple state-level actors, with varying degrees of input from the business community and outside experts.* Therefore, we recommend that the state mandate the creation and implementation of a statewide talent strategic plan that harnesses Florida's existing educational assets and guides them toward a common goal: training a new generation of knowledge workers for Florida who can keep pace with competitors, both national and international.

5.1.1 Driving this strategic plan should be a comprehensive and quantitative assessment of the current and future talent requirements of the state's economy and a methodical examination of all options, public and private, to increase high-quality degree and certification production in the state to meet Florida's short- and long-term needs. Further, proposed strategies must be designed and weighed to provide maximum economic return to the state.

5.1.2 Florida's unique, nationally-renowned Florida K-20 Education Data Warehouse (a data repository relating to students served and resources used in the public education system, which enables the tracking of individual students over time and across programs) and Florida Education and Training Placement Information Program (a data collection and consumer reporting system used to provide post-education follow-up data on former students and others) should be used to provide specific information in support of the strategic planning process.¹⁴⁶ Further, such databases should be expanded to the

* That being said, initiatives such as the Florida Chamber Foundation's "Six Pillars of Florida's Economy" and the "Florida Economic Dashboard" are beginning to coalesce these elements. See http://www.flfoundation.com/pillars.asp and http://www.theflscorecard.com. maximum extent practicable by state mandate and/or voluntary participation of external education or workforce providers.

5.1.3 The planning process should involve both public and private stakeholders from a variety of fields and establish short- and long-term goals and performance metrics, comparable across systems, so primary actors can plan for the deliverables that will be expected of them. As part of that process, we recommend holding annual joint planning and work summits among public and private, state-level education, economic development, workforce development, and business advocacy organizations to increase seamlessness and efficiency and accelerate performance in the Talent Supply Chain.

5.1.4 And, finally, the Legislature should endorse and codify both the planning process and, by reference, the resulting strategic plan. The strategic plan should be used by the state as a policymaking tool, an estimating tool, and a budgeting tool, with results and indicators being tracked over time.

Put simply, it's time for a comprehensive, coordinated, data-driven mission to guarantee our state's success in the global innovation economy. Floridians deserve nothing less.

APPENDIX A Florida Education: By the Numbers

FLORIDA COMPREHENSIVE ASSESSMENT TEST (FCAT)

FCAT scores are improving as students who entered the system under A+ Plan accountability provisions make their way through the elementary, middle, and high school grades. For reading and math (subjects tested every year), the best way to analyze FCAT scores is by cohort, i.e., looking longitudinally at elementary (grades 3-5), middle (grades 6-8), and high school (grades 9-10) performances combined since 2001. This is because activities/policies implemented at that point in time had specific impacts by grade level that smooth out when one looks at the gains in a combined fashion. For example, when Florida started retaining 3rd graders who could not read in 2003, there was a spike in 4th grade performance followed by perceived declines in 4th grade reading in 2005-06 after the two-year policy of retention had been fully implemented. The reverse scenario appeared in 3rd grade. However, if one looks at the total trend of 3rd, 4th and 5th grades combined, the gains are smoothed out and more comprehensive in capturing policy impacts.



Note: As is typical in this type of analysis, percentages do not total 100% due to exclusion of Level 2 scores. Source: Florida Department of Education data as cited by Foundation for Florida's Future.



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NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS (NAEP)

The question then becomes, "Is this an FCAT mirage, or is Florida student performance really improving?" One good way to evaluate this is to compare the performance of Florida students with that of students from around the nation. As the only nationally representative and continuing assessment of what America's students know and can do in various subject areas, the National Assessment of Educational Progress (NAEP) is a key instrument for making such comparisons. In fact, Florida students have shown commensurate improvement over the past several years.



FLORIDA NAEP RANKINGS: READING

Source: National Center for Education Statistics, Institute of Education Sciences, NAEP.



Source: Matthew Ladner and Vicki Murray, Demography is Not Destiny, October 2009.

NAEP READING SCALE SCORES: GRADE 4

FLORIDA'S FREE AND REDUCED LUNCH ELIGIBLE STUDENTS, HISPANICS & AFRICAN-AMERICANS VS. ALL CALIFORNIA STUDENTS



Source: Matthew Ladner and Vicki Murray, Demography is Not Destiny, October 2009.



FLORIDA NAEP RANKINGS: MATH

Source: National Center for Education Statistics, Institute of Education Sciences, NAEP.



Source: National Center for Education Statistics, Institute of Education Sciences, NAEP.

HIGH SCHOOL GRADUATION RATE

Although a record 76.3% graduation rate in 2008-09 is still nothing to boast about, the rate has, in fact, improved by 6.6 percentage points since 2004 when measured using a new, nationally-recognized National Governors Association Compact formula. The difference is even more pronounced (an increase of 18 percentage points since 1998) when measured using Florida's prior cohort methodology. (For a full explanation of graduation rate measurement methodologies and results, see Florida Department of Education, *Florida Public High School Graduation Rates, 2008-09*, November 2009, at http://www.fldoe. org/eias/eiaspubs/word/gradrate0809.doc.)

So what's changed? In September 2009, the State Board of Education (SBE) approved the state's new high school grading formula, which incorporates graduation rates into the grading of high schools. The graduation rate the SBE chose to use in the new grading formula is the state's National Governors Association (NGA) Compact rate, which includes standard and special diplomas but excludes GEDs, both regular and adult. Florida is using this rate in place of its regular rate because the U.S. Department of Education is moving all states to adopt a uniform calculation method by 2010-11, which includes standard diplomas but excludes GEDs and special diplomas. Using the NGA rate now will help transition Florida to the new federal rate when it becomes effective.

Florida, however, still uses the best practice of calculating a cohort graduation rate. A cohort is defined as a group of students on the same schedule to graduate. The graduation rate measures the percentage of students who graduate within four years of their first enrollment in ninth grade. Subsequent to their enrollment in ninth grade, exiting transfers and other such students are removed from the calculation. Entering transfer students are included in the count of the class with which they are scheduled to graduate, based on their date of enrollment.



FOUR-YEAR NGA GRADUATION RATE

Source: Florida Department of Education, Florida Public High School Graduation Rates, 2008-09, November 2009.

AFTER HIGH SCHOOL

The percentage of Florida high school graduates attending postsecondary institutions in the fall after graduation has been steadily improving – 17 percentage points since 1996.



Source: Florida Employment & Training Placement Information Program (FETPIP), Florida Department of Education as cited in Dr. Willis N. Holcombe, *The Future of Florida Imagining a World of Talent*, October 12, 2009.

WHAT HAPPENS AFTER THEY GRADUATE? STANDARD DIPLOMAS TO POSTSECONDARY



Note: Percentages are based on the unduplicated count and will add up to more than 100% because students may enroll in more than one sector. Source: PK-20 Education Data Warehouse, Florida Department of Education as cited in Dr. Willis N. Holcombe, *The Future of Florida Imagining a World of Talent*, October 12, 2009.

HIGH SCHOOL REMEDIATION

While remediation rates appear to be declining among Florida high school students pursuing higher education in the state, in 2007 more than a third of those students required remediation in at least one subject.



PERCENT OF FLORIDA COLLEGE-BOUND STUDENTS NEEDING REMEDIATION

Note: Reflects students graduating from Florida public high schools and attending Florida public postsecondary institutions. Source: PK-20 Education Data Warehouse, August 2009.

In 2007-08, the total cost of postsecondary remediation was \$144.1 million. The state paid \$85 million — more than half of these costs. However, remediation costs appear to be remaining fairly stable, if not increasing slightly in recent years.

COST ANALYSIS SUMMARY: REMEDIATION, 2007-08

Remediation Fund Sources	Amount	Percentage
General Revenue	\$74,417,169	52%
Lottery	\$10,563,381	7%
Total State Funds	\$84,980,550	<i>59%</i>
Other Revenue	\$5,952,910	4%
Matriculation and Tuition Fees	\$53,177,213	37%
Total All Sources	\$144,110,674	100%

Note: Although this total only reflects remediation provided by Florida Colleges and includes non-first-time-in-college students, it is a reasonable estimate of remediation cost for recent Florida high school graduates because, by law, Florida Colleges provide nearly all remediation in the state and case counts between this analysis and the preceding analysis are comparable.

Source: Florida Department of Education, The Fact Book, Report For The Florida College System, 2009.



Source: Florida Department of Education, The Fact Book, Report For The Florida College System, 2001-2009.

FLORIDA COLLEGE SYSTEM



Source: State Board of Education & Board of Governors Joint Workshop, Background Information, November 12, 2009.



MINORITY DEGREES AS PERCENTAGE OF TOTAL

Note: "Degrees" are defined as AS, AA, and Baccalaureate degrees. Source: Florida Department of Education, Division of Florida Colleges, December 2009.

PREPARING FLORIDA'S WORKFORCE: GROWING FLORIDA'S ECONOMY

- 67% (4,200) of nursing degrees awarded in Florida in 2006-07 were awarded by the Florida College System.
- 73% of first responders (police, fire, EMTs, and paramedics) graduate from Florida Colleges.
- Since they began in 2003-04, baccalaureate degree programs in the Florida College System have graduated over 500 students with a Bachelor of Science in Nursing.
- 62% of SUS College of Education graduates are Florida College System transfer students.
- In 2008-09, baccalaureate degree programs graduated 1,024 students with degrees in Education, Nursing, or Management, all with job placement rates exceeding 90%.

Source: Dr. Willis N. Holcombe, The Florida College System, October 6, 2009.



INITIAL ANNUALIZED EARNINGS FOR 2007-08 GRADUATES AND COMPLETERS

Note: Initial earnings may be affected by factors such as the age and experience of graduates and thus may not reflect long-term salary differentials. Source: Dr. Willis N. Holcombe, *The Future of Florida Imagining a World of Talent*, October 12, 2009.

STATE UNIVERSITY SYSTEM



SOURCES OF SUS UPPER DIVISION ENROLLMENT, 2007-08

Source: Dr. Willis N. Holcombe, The Future of Florida Imagining a World of Talent, October 12, 2009.



Source: Board of Governors, State University System of Florida, 2008 Accountability Report, March 1, 2009.



Source: Board of Governors, State University System of Florida, Interactive University Data at http://flbog.org/resources/iud/.



GRADUATE DEGREES BY MAJOR FIELD



Notes: "'Other" programs include law, law enforcement and public safety, public administration, social work, regional planning, parks and recreation, visual and performing arts, and multidisciplinary studies. Percentages may not total 100% due to rounding. Source: State Board of Education & Board of Governors Joint Workshop, *Background Information*, November 12, 2009.



CRITICAL NEEDS: EDUCATION, HEALTH, AND NURSING DEGREES GRANTED

Source: Board of Governors, State University System of Florida, 2008 Accountability Report, March 1, 2009.



RESEARCH AND DEVELOPMENT EXPENDITURES, TOTAL AND PER FACULTY

Source: Board of Governors, State University System of Florida, 2008 Accountability Report, March 1, 2009.

PRIVATE, NONPROFIT INSTITUTIONS



Source: The Independent Colleges and Universities of Florida, November 2009.



Source: The Independent Colleges and Universities of Florida, November 2009.

BACHELOR'S DEGREES BY MAJOR FIELD

Engineering 3%

Business 29%

Education 7%

Computer & Information

Sciences 3%



Note: Percentages may not total 100% due to rounding. Source: The Independent Colleges and Universities of Florida, *2008-2009 Accountability Report*, September 2009.

Other 59%

GRADUATE DEGREES BY MAJOR FIELD



Source: The Independent Colleges and Universities of Florida, November 2009.



Source: The Independent Colleges and Universities of Florida, November 2009.



Source: The Independent Colleges and Universities of Florida, November 2009.

PRIVATE, FOR-PROFIT INSTITUTIONS



Source: Commission for Independent Education, December 2009.

WHAT IS THE ROI?

We produce...

- 64% of IT and computer science credentials
- 55% of health and allied health science credentials
- 50% of business and business management credentials
- 34% of legal professional support credentials

Source: Florida Association of Postsecondary Schools and Colleges, *Presentation to the State Universities and Private Colleges Appropriations Committee*, February 10, 2009.

GRADUATES BY OCCUPATIONAL CLUSTER (2006-07)

Occupational Cluster	Graduates
Aviation -excluding repair	1,439
Barge and Boat Operations	122
Business & Management (Certificate, BA)	39,456
Business & Management (Graduate degrees)	9,717
Child Care	3,121
Cosmetology	14,261
Culinary	2,216
Education (PhD)	1,091
Health & Allied Health Sciences	60,865
IT & Computer Science	9,487
Legal (Lawyers)	2,565
Paralegal, Legal Sect, Court Reporter	1,795
Security, Criminal Justice	8,306
Truck Driving, CVD	5,514
Welding	420

Notes: "Graduates" might receive certificates or associate, baccalaureate, or graduate degrees. The "Health & Allied Health Sciences" occupational cluster includes pharmacy technicians, home health workers, medical coders, nursing assistants, cardiovascular technicians, etc. Source: Florida Association of Postsecondary Schools and Colleges, *Florida's Career Colleges Play a Critical Role in State's Workforce*, August 28, 2008.

RELATIVE BACCALAUREATE DEGREE PRODUCTION



Note: The baccalaureate degree production for the private, for-profit institutions was estimated based on preliminary and historical data from the Commission for Independent Education as well as related estimates in the sources listed below. Sources: State Board of Education & Board of Governors Joint Workshop, *Background Information*, November 12, 2009, and The Independent Colleges and Universities of Florida, *2008-2009 Accountability Report*, September 2009.

WORKFORCE EDUCATION



STATEWIDE DISTRICT WORKFORCE EDUCATION ENROLLMENT (2008-09)

Source: State Board of Education & Board of Governors Joint Workshop, Background Information, November 12, 2009.



TOP TEN DISTRICT POSTSECONDARY CAREER AND TECHNICAL **EDUCATION PROGRAM ENROLLMENTS (2008-2009)**



EMPLOYMENT OUTCOMES

Notes: Estimated initial full-time annual earnings of a district certificate program completer in 2006-07 was \$32,112. 71% of district certificate program completers in 2006-07 were employed in Fall 2007.

Sources: State Board of Education & Board of Governors Joint Workshop, Background Information, November 12, 2009, and Dr. Willis N. Holcombe, The Future of Florida Imagining a World of Talent, October 12, 2009.

Source: State Board of Education & Board of Governors Joint Workshop, Background Information, November 12, 2009.


FLORIDA COLLEGE SYSTEM, WORKFORCE EDUCATION: HEADCOUNT BY PROGRAM AREA

Source: Department of Education, Florida College System, 2009 Factbook.

APPENDIX B The Common Core State Standards Initiative



The Common Core State Standards Initiative is a significant and historic opportunity for states to collectively develop and adopt a core set of academic standards in mathematics and English language arts. Forty-eight states and three territories have joined the Common Core State Standards Initiative. The initiative is being jointly led by the NGA Center for Best Practices and the Council of Chief State School Officers in partnership with Achieve, ACT, and the College Board. It builds directly on recent efforts of leading organizations and states that have focused on developing college- and career-ready standards and ensures these standards are evidence- and research-based and internationally benchmarked to top-performing countries.

Why is this initiative important?

Currently, every state has its own set of academic standards, meaning public education students in each state are learning to different levels. All students must be prepared to compete with not only their American peers in the next state, but with students from around the world. If all states and territories adopt the common core state standards, this initiative will affect 45.1 million students which is about 91 percent of the student population.

Why is a common core of state standards good for students?

These standards will help prepare students with the knowledge and skills they need to succeed in college and careers and to be prepared to compete globally. Additionally, expectations for students will be consistent across all states and territories; this consistency will support students transitioning between states. Also, clearer standards will help students better understand what is expected of them and allow for more self-directed learning.

Why is a common core of state standards good for parents?

A common core of state standards will help parents understand what is expected of students and for college and work success. This understanding of what is expected of students will provide parents the opportunities to meaningfully engage in their children's education.

Why is a common core of state standards good for educators?

A common core of state standards will allow for more focused pre-service and professional development. Additionally, a common core will help assure that what is taught is aligned with assessments including formative, summative, and benchmarking. Also, educators will have the opportunity to tailor curriculum and teaching methods and promote the sharing of best practices.

Why is a common core of state standards good for states?

A common core of state standards will clearly articulate to parents, teachers, and the general public expectations for students. Shared standards will also help states better evaluate policy changes and identify best practices and needs for students and educators.

What is being produced and when?

A draft of the common core of state standards in mathematics and English language arts is available for public comment on www.corestandards.org. They are expected to be validated in late 2009. Additionally, in the winter of 2009/2010, the draft standards for grades K- 12 will be released.

What does the process look like?

One of the first official steps in the Common Core State Standards Initiative was for CCSSO and the NGA Center to form a National Policy Forum which met initially in January 2009. This forum is intended as a way to establish a shared understanding of the scope and elements of the common core state standards initiative and coordinate implementation and adoption.

The Standards Development Work Group is currently engaged in determining and writing the college and career readiness standards in mathematics and English language arts. This group is composed of content experts from Achieve, ACT, and the College Board. The Work Group's deliberations will be confidential throughout the process. States and national education organizations will have an opportunity to review and provide evidence-based feedback on the draft documents throughout the process.

Also, as a step in the standards development process, CCSSO and the NGA Center are overseeing the work of a Feedback Group. The role of this Feedback Group is to provide information backed by research to inform the standards development process by offering expert input on draft documents.

The final step in the development of these standards is the creation of an expert Validation Committee comprised of national and international experts on standards and in the content areas. This group will review the process and substance of the common core state standards to ensure they are research and evidence-based and will validate state adoption of the common core standards. Members of the committee will be nominated by governors and chiefs of the participating states and selected by a group of four governors and four chiefs.

What will the common core standards look like?

The common core state standards will be fewer, clearer, and higher. They will articulate to parents, teachers, and the general public expectations for what students will know and be able to do grade by grade and when they graduate from high school. The standards will be internationally benchmarked, evidence- and research-based, and ready for states to adopt.

What happens after the common core standards are developed?

Adoption of the common core state standards is voluntary for states; states choosing to align their standards to the common core state standards have agreed the common core will represent at least 85 percent of the state's standards in mathematics and English language arts. Additionally, there is an obvious role for assessment; some states will voluntarily come together to develop new, innovative, common assessments.

What happens after states adopt common core standards?

The common core state standards are the first step in transforming our education system. For systemic change to occur educators must be supported (e.g., time, resources, professional development) in changing classroom practice based on the standards. Instructional materials and assessments that align to the standards and measure and support student progress will need to be developed.

Source: Common Core State Standards Initiative, December 2009, at http://www.corestandards.org/.

APPENDIX C

Postsecondary Performance Measure Examples^{1,2}

Inputs

Indicator	Description
Full-time Equivalent (FTE) enrollment	The number of students on campus will always be a quantifiable driver of instructional activity. By tracking full-time equivalents, both full- and part-time students can be accounted for.
Educational revenues per FTE	How much funding is driving the system? Adjusted for inflation and cost-of-living
Percent of income needed to pay for college expenses minus financial aid	An indicator of accessibility
State investment in need-based financial aid as compared to the federal investment	Another indicator of accessibility which speaks directly to the goal of making higher education affordable to all Floridians
Student-faculty balance	An indicator of students' opportunity to learn directly from experienced faculty
Outputs	
Indicator	Description
Degrees granted per 100,000 working age population (Bachelor's, Master's, Doctoral, First professional)	An educated workforce is key to Florida's sustained economic performance. Additionally, it is critical that the working age demographic be especially prepared to support an aging populace that will be growing in size in the coming decades.
	It is critical that Florida's higher education system be tailored to produce graduates who

Degrees granted in targeted fields, meet the needs of (1) the high-growth businesses that will drive and diversify the state's innovation economy, and (2) the state's critical support occupations.

Depending how one frames this measures, it could be an input, output, or outcome.

An indicator of how well universities are preparing students to enter certain professional Pass rates on licensure examinations occupations

R&D expenditures, by source

Efficiency Measures

including STEM

Indicator	Description
Four-year and six-year graduation rates and six-year retention rates of bachelor's students	Graduation and retention rates must be examined closely for underlying drivers.
Education appropriations per degree granted	Tracking this indicator enables postsecondary systems and institutions to increase their efficiency either by reducing the cost per credit hour or by reducing the credit hours funded. Adjusted for inflation and cost-of-living
Indirect expenditures as a percentage of total expenditures	Indicator of administrative overhead

¹ Data regarding minority participation and performance regarding these measures should also be developed. ² The Board of Governors is also developing a set of accountability measures for universities. However, the metrics suggested here are often systemic in nature, rather than targeted toward individual universities, and focus more heavily on outcomes than do the proposed Board of Governors' measures.

Outcomes

Indicator	Description
Performance on standardized end-of- college learning outcome exams	As part of the Voluntary System of Accountability, more than 300 participating public colleges select one of the following three tests to measure students' learning during their college careers: the Collegiate Learning Assessment (Council for Aid to Education), the Collegiate Assessment of Academic Proficiency (ACT Inc.), and the Measure of Academic Proficiency and Progress (Educational Testing Service).
Increase in wages as a result of earning a degree	Although Florida Education and Training Placement Information Program (FETPIP) data has limitations, it does capture information relating to approximately 75% of graduates and is attempting to expand its umbrella to graduates moving out-of-state. Further, it is believed that such data can be improved by adjusting for inflation and regional cost-of-living differences as well as attempting to track graduates from various systems over multiple years.
Workforce contribution (Percent of graduates entering into/retained in Florida workforce, by targeted sector or occupation)	One of the goals of Florida's higher education system is to generate workers who contribute to the state's economy. Tracking by sector and/or occupation will ensure that the education system is aligned with current and projected economic realities of the state.
Customer satisfaction Alumni Employers 	Several states conduct customer satisfaction surveys in order to capture data regarding complex outcomes, such as the economic value of their degrees. For example, an alumnus might be asked to rate the value of their educational experience to their professional success while an employer might be asked to rate the value of a degree program to its bottom-line. In the past, the Board of Governors has recommended such surveys, which universities already conduct on a limited basis. Use of a standard survey by postsecondary systems as a performance indicator would compliment the limited, database-driven FETPIP information.
Undergraduate peer assessment ratings and rankings	The halo effect is an intrinsic element of the world of higher education. When equal grant applications are before a reviewer, who gets the funding – Johns Hopkins or State U? When faced with two similar job applicants, whom does the employer pick – the Harvard grad or the mid-major alum? Surveying administrators at peer institutions, the annual U.S. News and World Report peer assessment ratings are a major gauge of that halo effect.
Rankings of Florida research universities among U.S. public universities	This is a composite indicator providing a snapshot of research performance. Founded at the University of Florida and grounded in years of research, the Center for Measuring University Performance at Arizona State University annually rates and ranks American research university performance. As noted by the Pappas Consulting Group, Center reports have "wide currency in the higher education research community." Factors considered in the index include total research, federal research, endowment assets, annual giving, national academy members, faculty awards, doctorates granted, postdoctoral appointees, and SAT/ACT range.
Patents generated, licensing income, spin-offs, and commercialization	Tech transfer measures to compliment ranking information from the Center for Measuring University Performance

APPENDIX D

Summary of Senate Bill 2682 (2009) – State College Baccalaureate Degree Programs

Based on the non-fiscally-related recommendations of the State College Pilot Project and the Florida College System Task Force, Senate Bill 2682 (as enacted into law), in part:

- Renames the Division of Community Colleges within the Department of Education as the Division of Florida Colleges.
- Defines the colleges' service areas.
- Authorizes a community college to change its name to "college" or "state college" if it has been authorized to grant baccalaureate degrees and has been accredited by the Southern Association of Colleges and Schools to do so or, alternatively, with board-of-trustees and State Board of Education approval, and to require the college to seek a statutory name change in the year following the college's name change.
- Revises the primary mission of the community colleges to include upper-level instruction and awarding baccalaureate degrees as authorized by law. However, any Florida College that offers one or more baccalaureate degree programs must maintain as its primary mission:
 - Responsibility for responding to community needs for postsecondary academic education and career degree education.
 - The provision of associate degrees that provide access to a university.
 - The maintenance of an open-door admission policy for associate-level degree programs and workforce education programs.
 - Continued outreach to underserved populations.
 - Continued provision of remedial education.
 - Compliance with all provisions of the statewide articulation agreement which relate to 2-year and 4-year public degreegranting institutions as adopted by the State Board of Education.
- Provides that a Florida College may not award graduate credit, participate in intercollegiate athletics beyond the 2-year level, or terminate its associate in arts or associate in science degree programs as a result of being authorized to offer one or more baccalaureate degree programs because the Legislature intends that the primary responsibility of a Florida College, including a Florida College that offers baccalaureate degree programs, continue to be the provision of associate degrees that provide access to a university.
- Requires initial approval of a baccalaureate degree program by the State Board of Education and provides for a proposal process that includes the submittal by a Florida College of a notice of its intent to propose a baccalaureate degree program to the Division of Florida Colleges at least 100 days before the submission of its proposal. The notice must include a brief description of the program, the workforce demand and unmet need for graduates of the program, the geographic region to be served, and an estimated timeframe for implementation. The Division of Florida Colleges must then forward the notice of intent to the Chancellor of the State University System, the President of the Independent Colleges and Universities of Florida, and the Executive Director of the Commission for Independent Education. State universities shall have 60 days following receipt of the notice by the Chancellor of the State University System to submit an alternative proposal to offer the baccalaureate degree program. If a proposal from a state university is not received within the 60-day period, the State Board of Education shall provide regionally accredited private colleges and universities 30 days to submit an alternative proposal. Alternative proposals shall be submitted to the Division of Florida College's proposal.
- Provides criteria for the evaluation of a baccalaureate degree proposal, including, at a minimum, a description of the planning process and timeline for implementation; an analysis of workforce demand and unmet need for graduates of the

program on a district, regional, or statewide basis, as appropriate; identification of the facilities, equipment, and library and academic resources that will be used to deliver the program; the program cost analysis of creating a new baccalaureate degree program when compared to alternative proposals and other program delivery options; the program's admission requirements, academic content, curriculum, faculty credentials, student-to-teacher ratios, and accreditation plan; the program's enrollment projections and funding requirements; and a plan of action if the program is terminated.

- Provides for an exemption from the requirement for State Board of Education approval of baccalaureate degree programs
 for colleges that meet certain criteria, including accreditation by the Commission on Colleges of the Southern Association
 of Colleges and Schools, a history of offering baccalaureate degrees for 3 or more years, maintenance of qualified
 faculty and institutional resources, maintenance of enrollment projections in previously approved programs, appropriate
 management of fiscal resources, compliance with the historical mission and responsibility requirements for community
 colleges, timely submission of the institution's annual performance accountability report, and other indicators of success
 such as program completers, placements, and surveys of students and employers.
- Requires the statewide articulation agreement to provide for the admission of Associate of Arts degree graduates to a state college or university.
- Provides for community college Associate of Arts degree graduates to receive priority over out-of-state students for admission to an institution within the Florida College System for upper-division programs.

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