

Florida Board of Education

Strategic Planning Workshop 4:
*Selecting Strategic Imperatives
for the K-20 Education System*

January 17, 2002

accenture



Purpose of This Document

This document is intended to help the Florida Board of Education organize and focus its thinking with regard to identifying and prioritizing *strategic imperatives* for Florida's K-20 Education System. These imperatives will be included in the final strategic plan the Board issues later this year. In particular, the document's purpose is to inform Board deliberations addressing:

- Specific definition of the K-20 Education System's statutory goals (Goal Definitions)
- Necessary conditions to be met for attaining these goals (Causal Models)
- Major challenges to be overcome in attaining each goal (Challenges)
- Prioritization of these challenges for remediation by the Secretary of Education and his management team (Imperative Selection)

Contents

- Workshop Objectives
- Goal Definitions
- Causal Models
- Challenges
- Imperative Selection
- Appendix

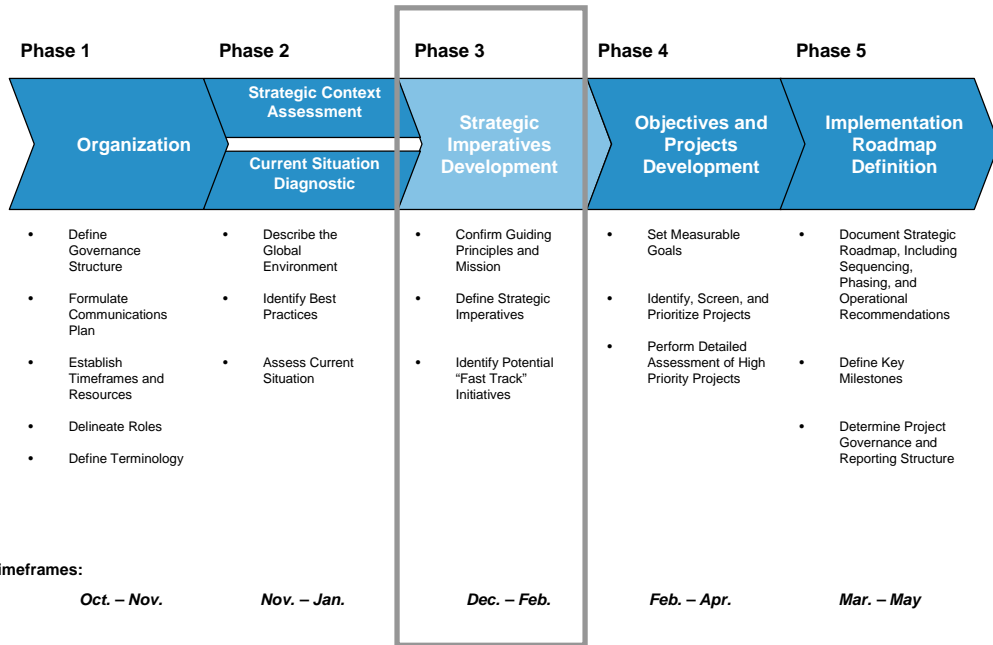
Contents

■ Workshop Objectives

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The Board's goal is to complete the definition of its strategic imperatives for hand-off to the Secretary of Education in February 2002.

Phases of Strategic Planning for Florida's K-20 Education System



Near-Term Strategic Planning Schedule

	Event	Agenda
December 13	Florida BOE Workshop Tallahassee	<ul style="list-style-type: none"> Schedule for Strategic Imperative Development Summary of Global Education Trends Discussion of Proposed <i>Form</i> of Strategic Imperatives
January 17	Florida BOE Workshop Pensacola	<ul style="list-style-type: none"> Analysis of Florida's Main Education Challenges Selection of Finalist Strategic Imperatives
January 31	Delivery to Florida BOE Members of Draft Report on Recommended Strategic Imperatives	
February (Date TBD)	Florida BOE Meeting	Formal Adoption of Strategic Imperatives

Our aim in Pensacola is to reach a working consensus among BOE members on K-20 Education System goal definitions and strategic imperatives.

Pensacola Workshop Objectives

- Adopt meaningful working definitions for the four statutory goals of Florida's K-20 Education System
- Finalize a list of *major* substantive challenges or impediments to the education system's attainment of these statutory goals
- Prioritize the list of challenges
- Select a subset of the challenges as strategic imperatives for the K-20 Education System

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Given the breadth and diverse needs of the education system’s customer population, the Governor and Legislature have called for a focus on four goals.

Statutory Goals of Florida’s K-20 Education System

Progress To Be Measured By:

Highest Student Achievement

- Student FCAT performance and annual learning gains
- Number and percentage of schools that improve at least one school performance grade designation or maintain a school performance grade designation of "A" pursuant to s. 229.57
- Graduation or completion rates at all learning levels

Seamless Articulation and Maximum Access

- Percentage of students who demonstrate readiness for the educational level they are entering, from kindergarten through postsecondary education and into the workforce
- Number and percentage of students needing remediation
- Percentage of Floridians who complete associate, baccalaureate, professional, and postgraduate degrees
- Number and percentage of credits that articulate
- Extent to which each set of exit-point requirements matches the next set of entrance-point requirements

Skilled Workforce and Economic Development

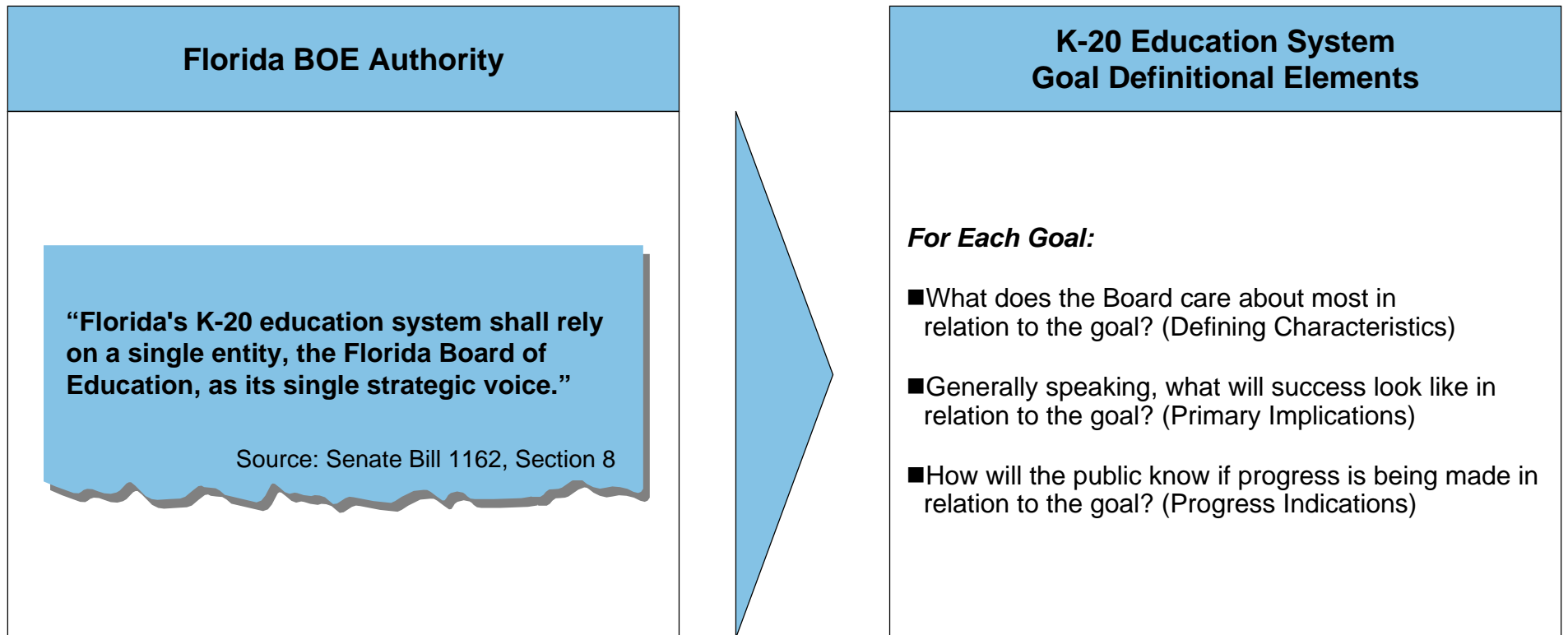
- Number and percentage of graduates employed in their areas of preparation
- Percentage of Floridians with high school diplomas and postsecondary education credentials
- Percentage of business and community members who find Florida's graduates possess the skills they need

Quality, Efficient Services

- Cost per completer or graduate
 - Average cost per non-completer at each educational level
 - Cost disparity across institutions offering the same degrees
 - Percentage of education customers at each educational level who are satisfied with the education provided
-

Source: Senate Bill 1162, Section 9

To focus effectively on these statutory goals, the Florida Board of Education must first use its authority to define each goal using consistent elements.



For the Board’s consideration and use, we have developed a working definition of each goal according to this structure.

Proposed K-20 Education System Goal Definitions

Statutory Goal	Working Definition
Highest Student Achievement	Attainment of rigorous academic standards that consistently culminates in timely advancement to high school graduation and, after high school graduation, in qualification without remediation for either post-secondary education leading to a four-year degree or skilled employment
Seamless Articulation and Maximum Access	Compatible curricula and standards that are consistently applied across educational levels and institutions so as to increase students’ interest in and qualification for degree- and certification-oriented post-secondary education
Skilled Workforce and Economic Development	Effective matching of K-20 educational curricula and graduate proficiency standards with primary requirements for qualified employees from industries critical to Florida’s future economic prosperity
Quality, Efficient Services	Effective management of K-20 resources (i.e., capital, operating, and human resources), consistently high responsiveness to customers, and accountability for results across the K-20 system

Note: See Appendix for description of each statutory goal’s definitional elements.

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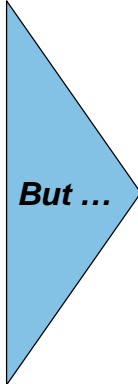
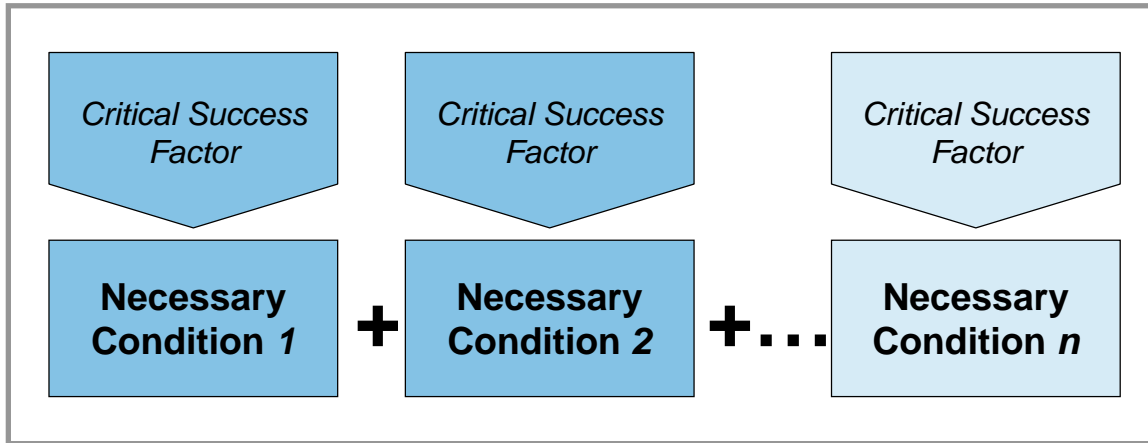
- Appendix

In determining strategic imperatives, the Board needs to distinguish between causal factors it can influence and those that are generally beyond its control.

K-20 Education System Goal Causal Model

CONCEPTUAL

Which Conditions Have to Exist to Attain Each Goal?





How Much Can BOE Realistically Influence Attainment of Each Goal?



WORKING ASSUMPTION:
BOE Will Not Be Able to Influence Attainment of All Goals in Equal Measure

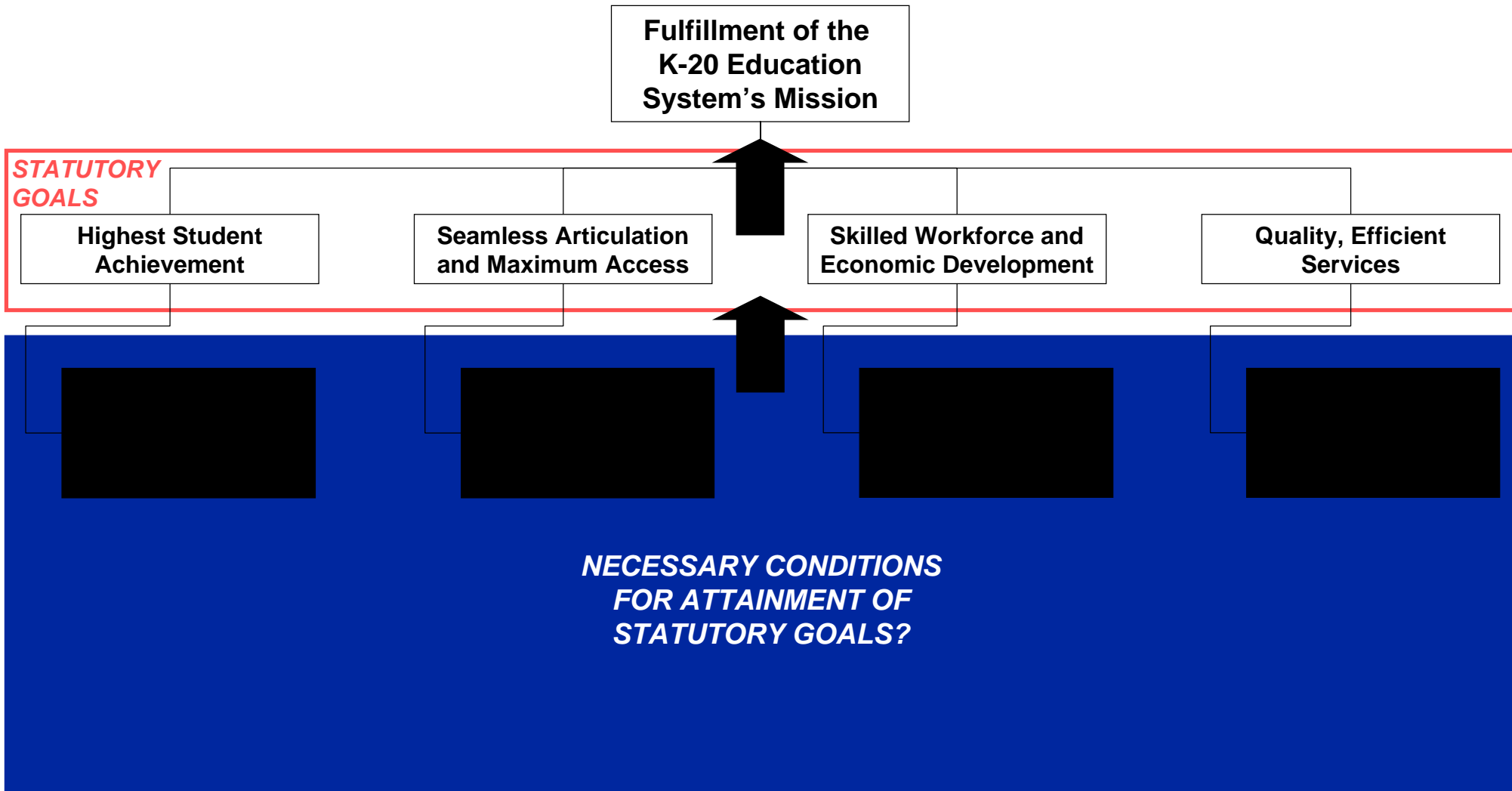
Key:

-  Subject to Florida BOE Influence
-  Not Subject to Florida BOE Influence

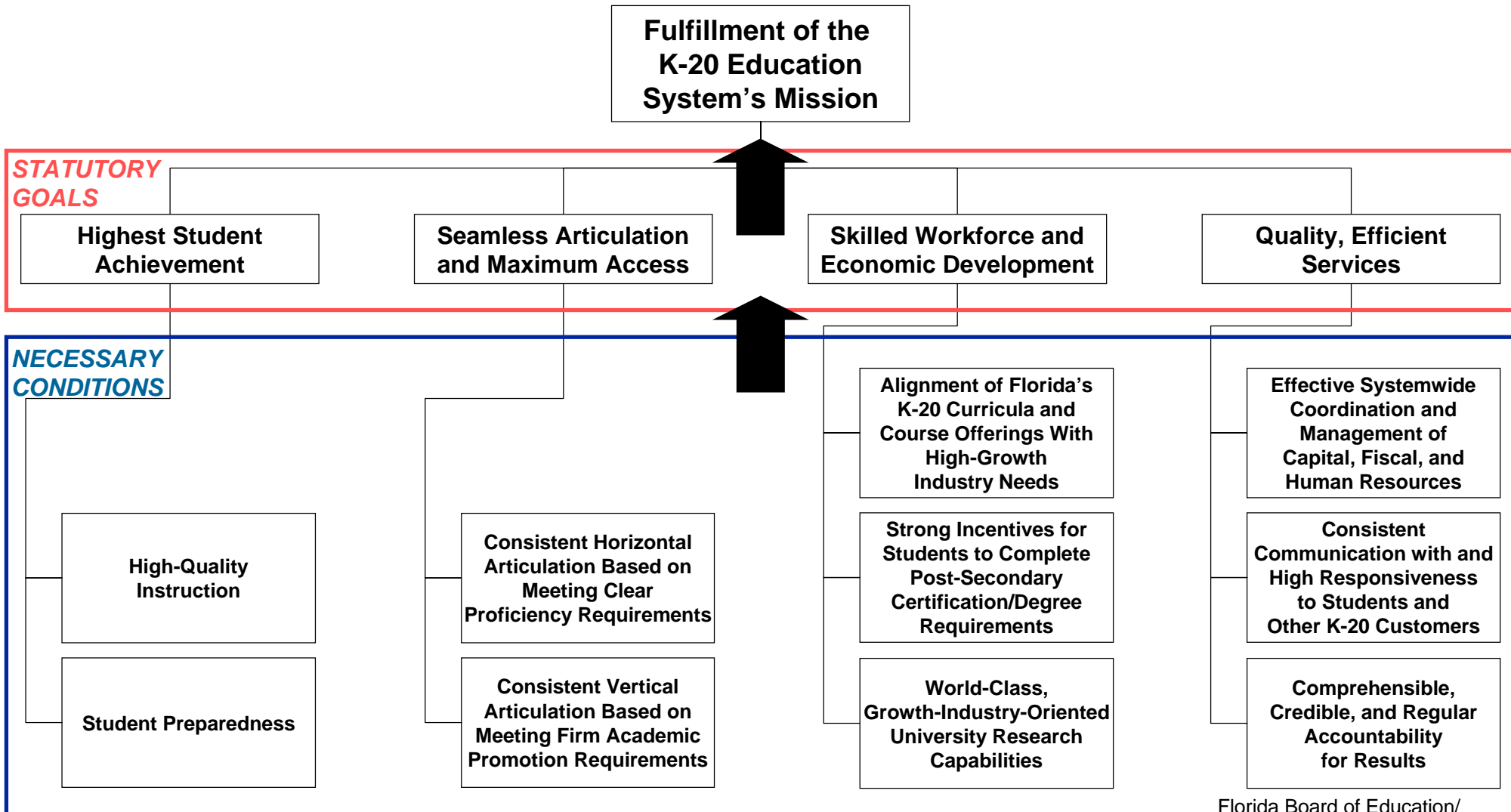
The Governor and Legislature see attainment of the K-20 Education System's goals as necessary to fulfilling the system's mission.



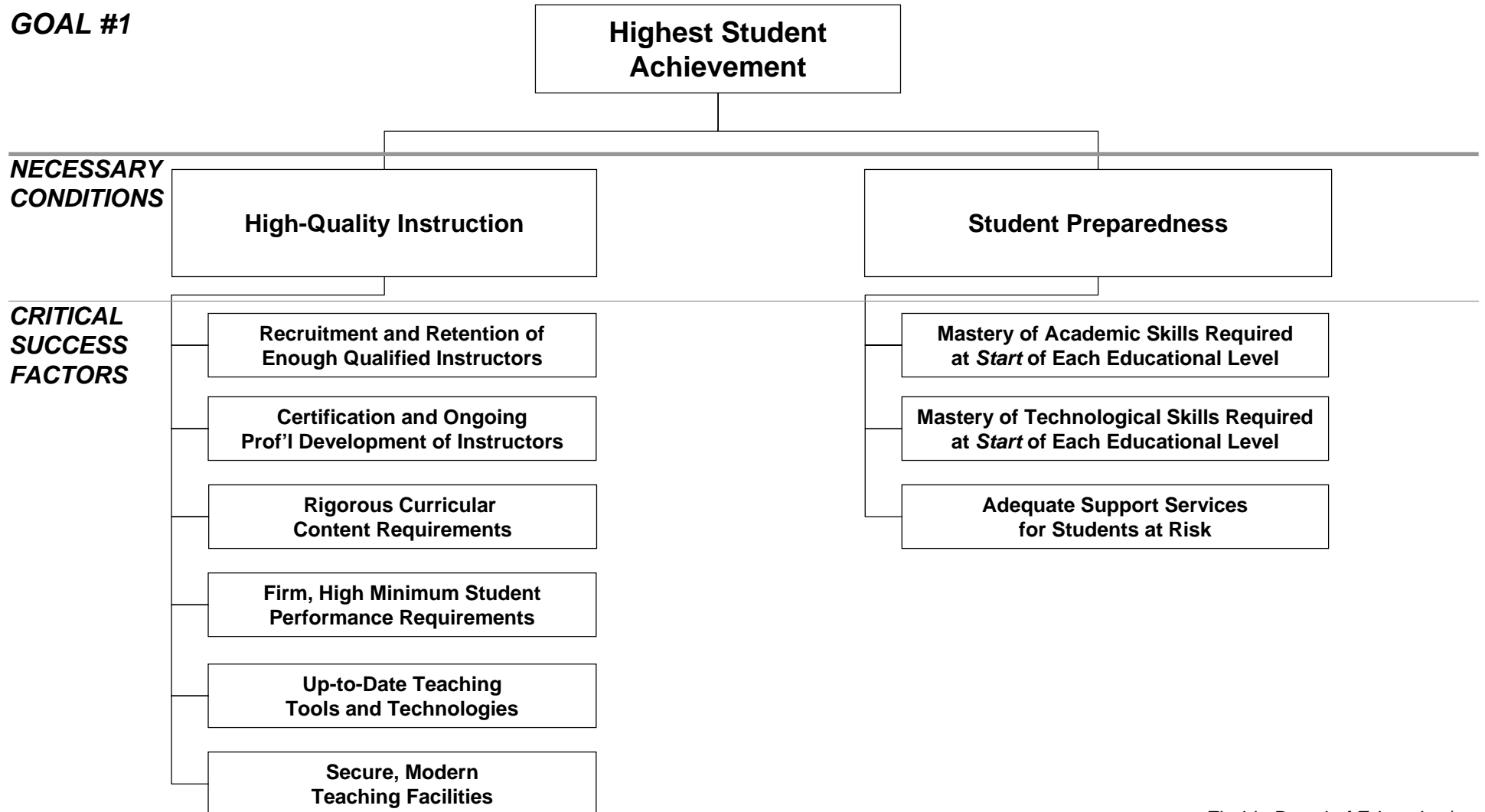
In turn, the Board must determine which conditions have to be met to make attainment of each statutory goal feasible.



For the Board’s consideration, we have developed working causal models that specify primary conditions needed to attain each goal.



The proposed model for “Highest Student Achievement” focuses on standards for instructor preparation, curricular rigor, and student readiness.



The model for “Seamless Articulation” focuses on the assurance of intra-level student proficiency and inter-level promotional readiness.

GOAL #2

**Seamless Articulation
and Maximum Access**

**NECESSARY
CONDITIONS**

**Consistent Horizontal
Articulation Based on Meeting
Clear Proficiency Requirements**

**Consistent Vertical
Articulation Based on Meeting Firm
Academic Promotion Requirements**

**CRITICAL
SUCCESS
FACTORS**

**Common H.S. and Post-Secondary
("Dual Enrollment") Course
Categorization Schemes**

**Effective Post-Secondary
Remedial Education Services**

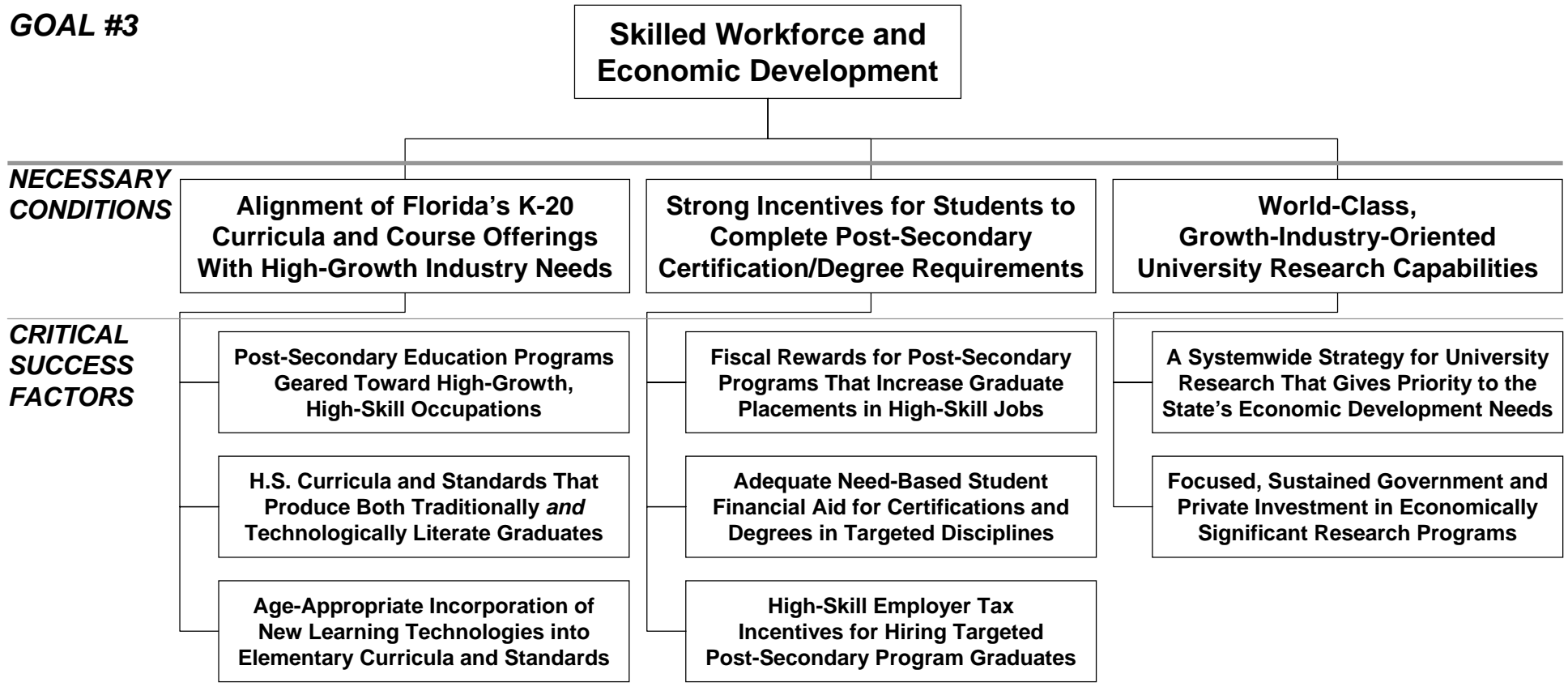
**Alignment of K-8 Completion
Requirements with
H.S. Admission Requirements**

**Alignment of H.S. Graduation
Requirements with Four-Year Degree
Program Admission Requirements**

**Effective K-12
Remedial Education Services**

The model for “Skilled Workforce and Economic Development” focuses on incorporation of high-growth industry needs into K-20 curricula, standards, and research.

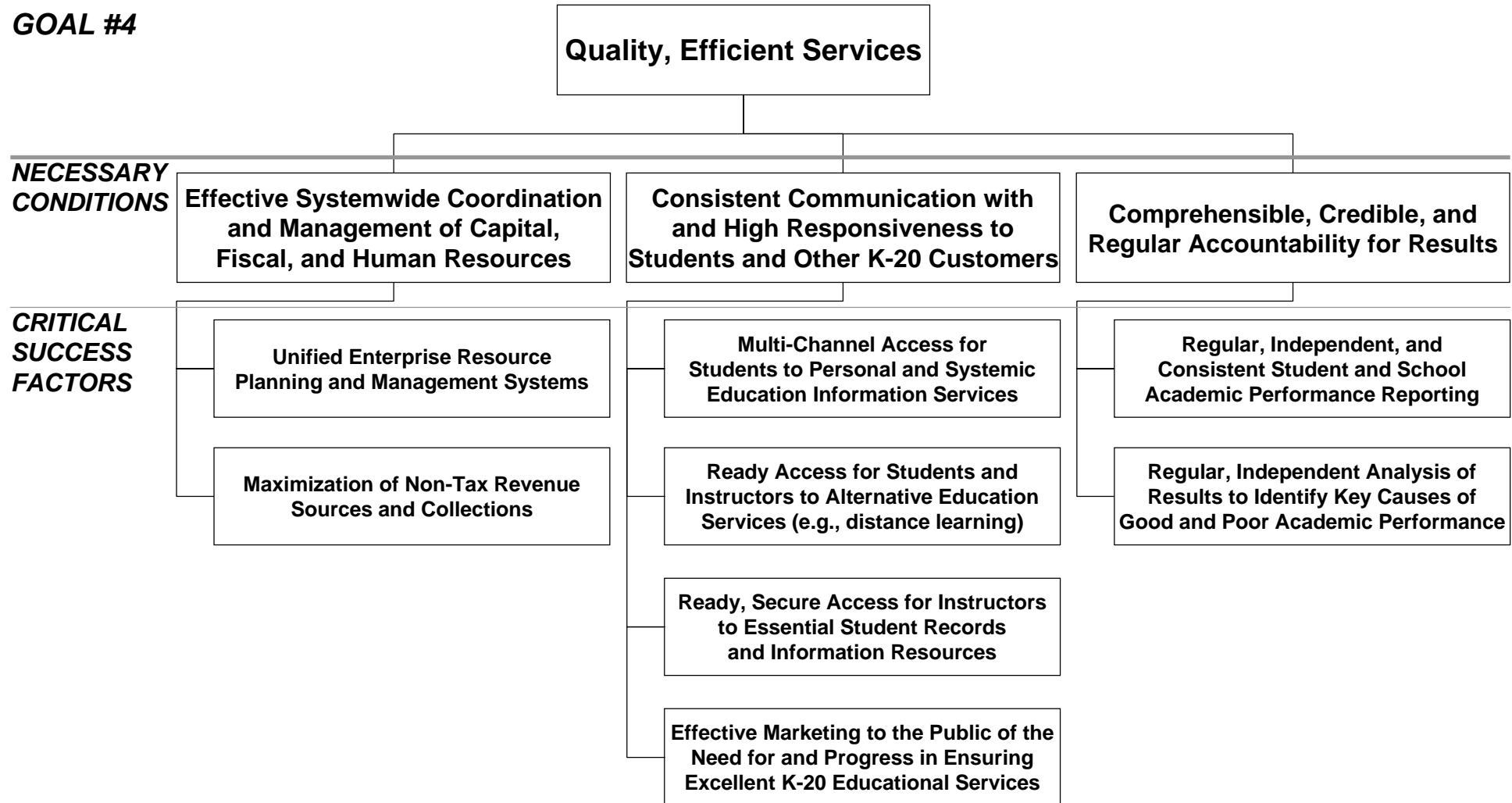
GOAL #3



Note: The term “post-secondary” used above refers to both Florida’s community colleges and universities.

The model for “Quality, Efficient Services” focuses on effective management systems, customer support, and academic performance reporting and analysis.

GOAL #4



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- Workshop Objectives

- Goal Definitions

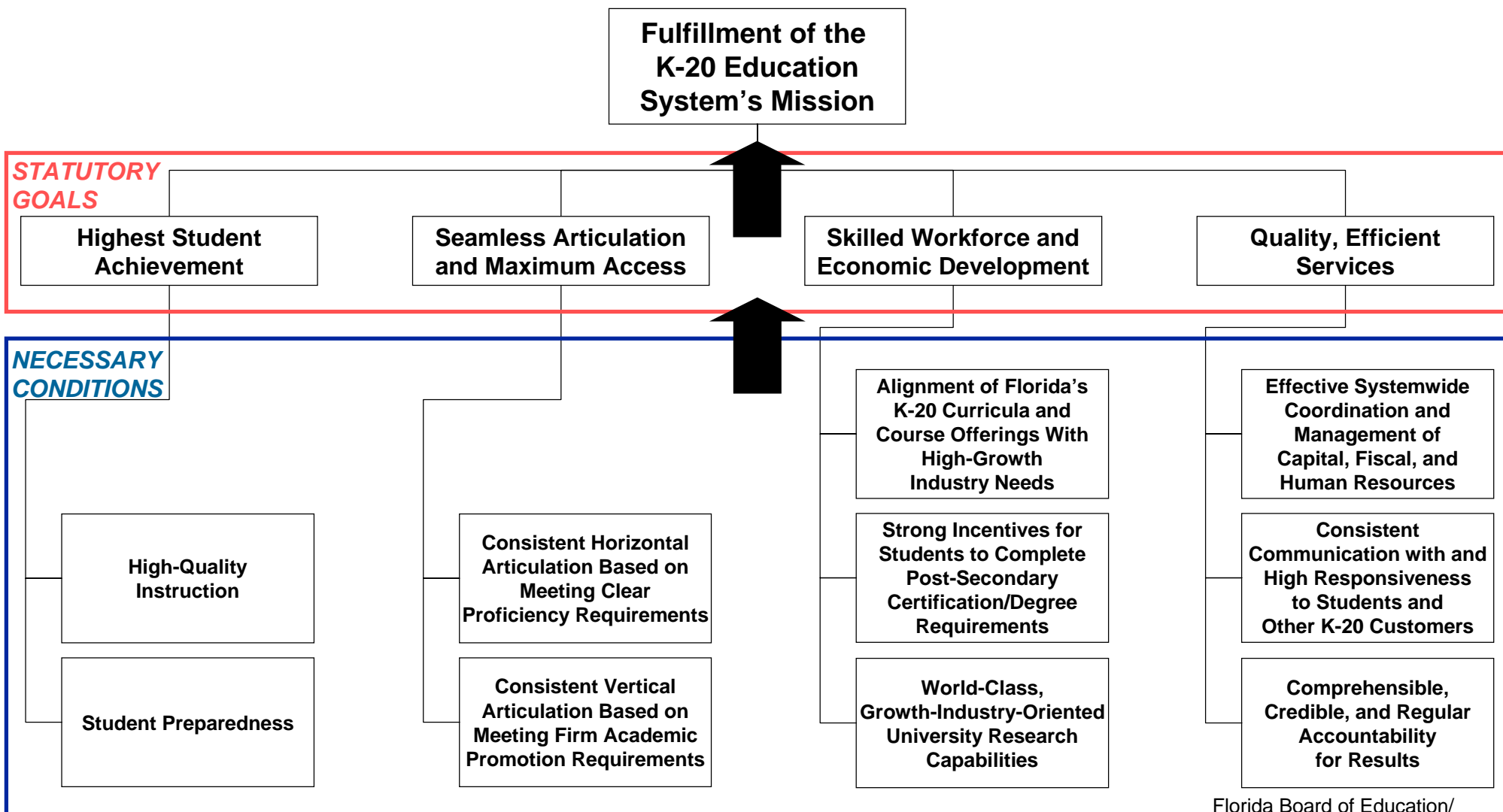
- Causal Models

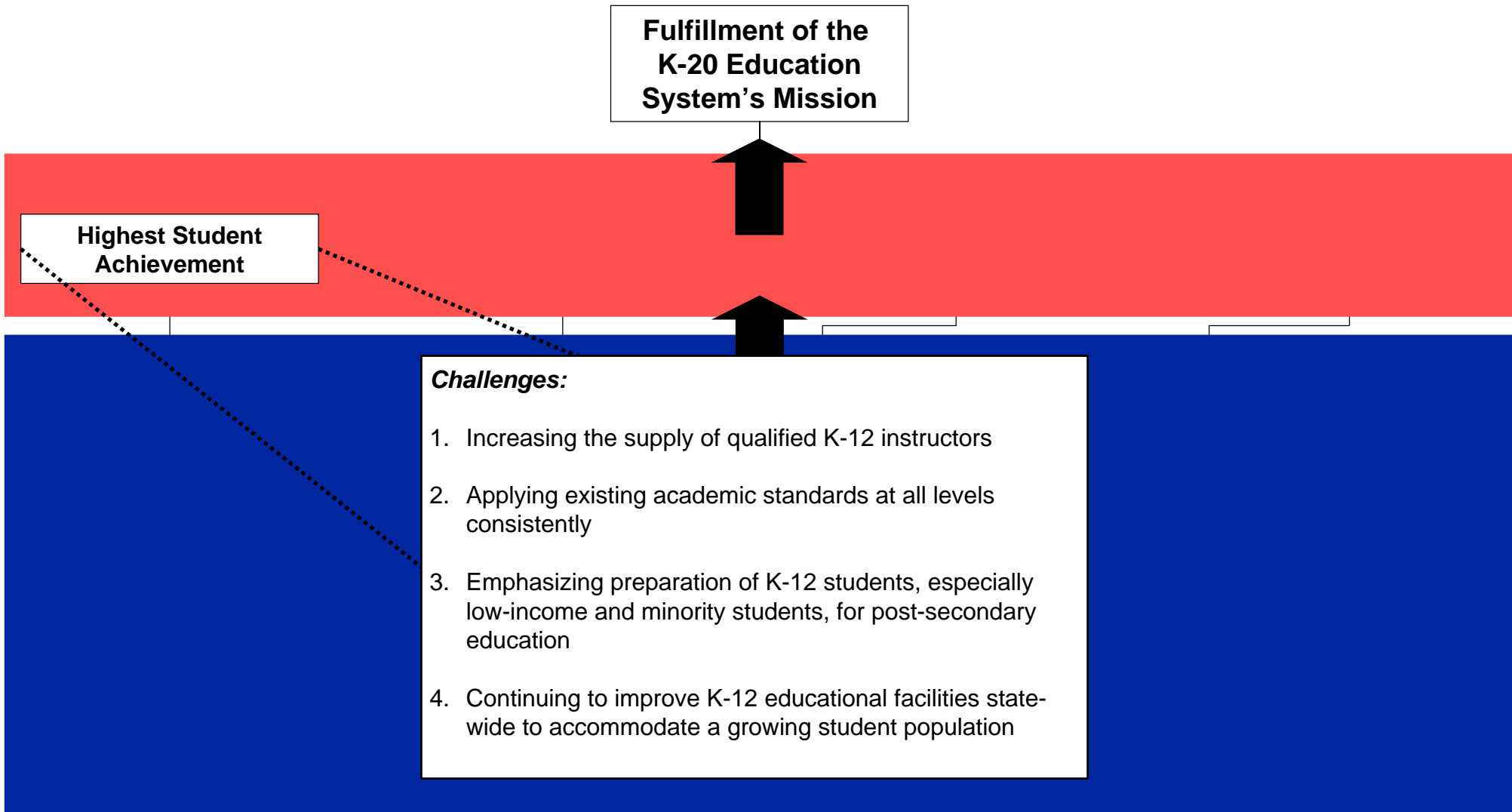
- **Challenges**

- Imperative Selection

- Appendix

Which challenges have to be met to create the conditions necessary for attaining the K-20 Education System's statutory goals?





Key challenges to attainment of “Highest Student Achievement” include instructor availability and capabilities, academic standards, and education support services.

Challenges to Attaining “Highest Student Achievement”

Why a Challenge?

1. Increasing the Supply of Qualified K-12 Instructors

- Florida’s education system is projected to have from 24,000 to 28,000 too few qualified applicants for instructor vacancies during the next nine years
- Many experienced instructors are leaving for both personal reasons and reasons related to conditions in the teaching profession in Florida
- This shortage in Florida, as in the rest of the nation, is being felt most acutely in critical academic subjects

2. Applying Existing Academic Standards at All Levels Consistently

- Addressing a problem shared by states nationwide, Florida is aiming to close the gap in academic achievement between minority and non-minority students
- Even though a high proportion of Florida students repeat first, middle school, and high school grades, many still are ill-prepared for post-secondary education

3. Emphasizing Preparation of K-12 Students, Especially Low-Income and Minority Students, for Post-Secondary Education

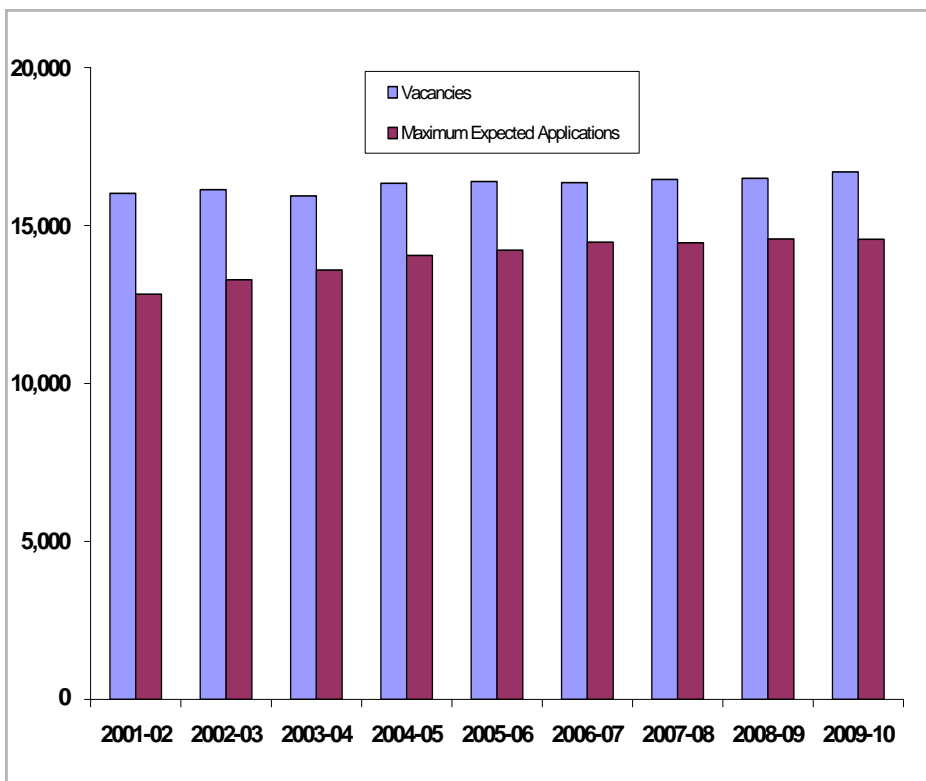
- On average, Florida students’ prospects for going to college and earning a baccalaureate degree change little after kindergarten

4. Continuing to Improve K-12 Educational Facilities Statewide to Accommodate a Growing Student Population

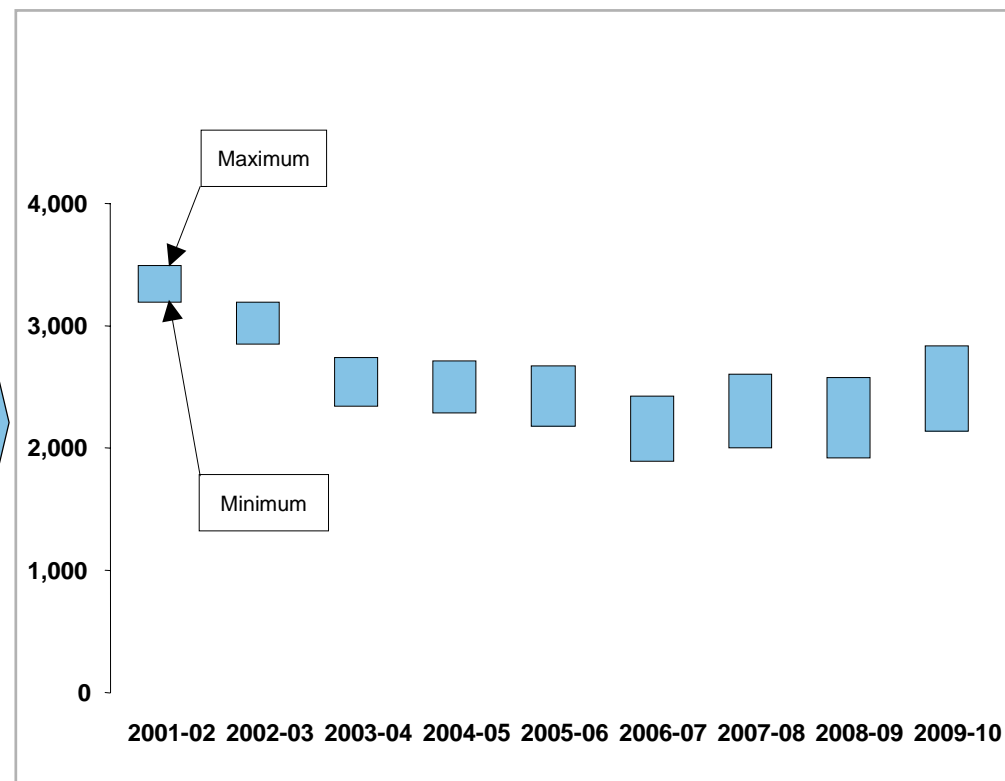
- Like other large, fast-growing states, Florida is working to expand, repair, or upgrade many of its K-12 educational facilities

Florida's education system is projected to have from 24,000 to 28,000 too few qualified applicants for instructor vacancies during the next nine years.

Projected K-12 Instructor Vacancies Compared to Qualified Applicants



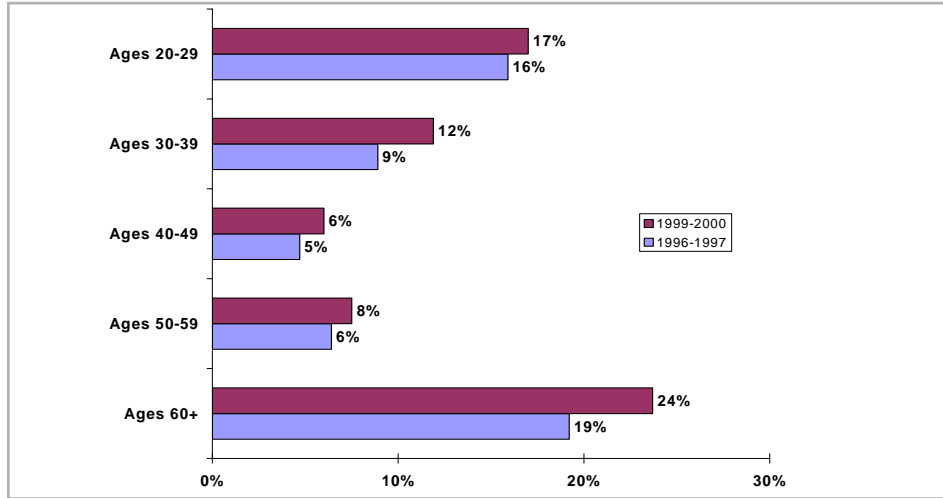
Projected Gap Between K-12 Instructor Demand and Supply



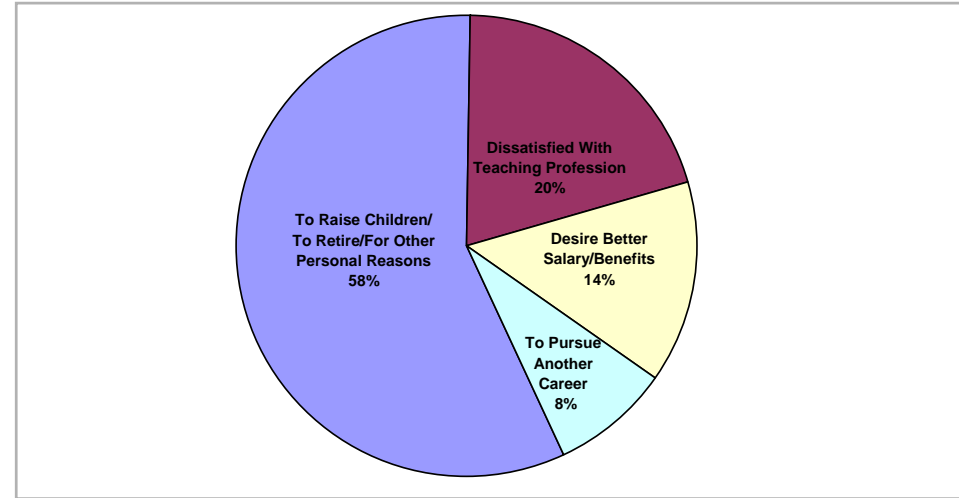
Sources: Florida Office of Economic and Demographic Research, *Teacher Demand and Supply Forecasts*, 2000; Accenture analysis

Many experienced instructors are leaving for both personal reasons and reasons related to conditions in the teaching profession in Florida.

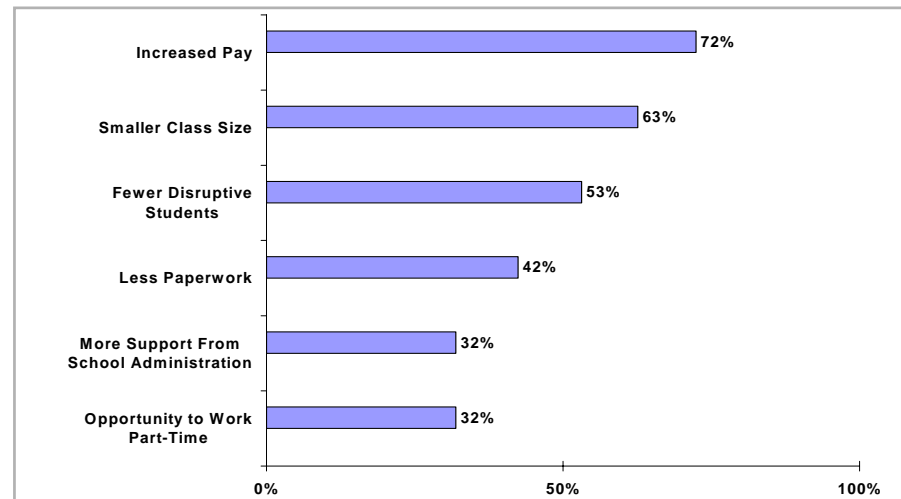
K-12 Instructors Who Left Teaching (1)



Why They Left (2)



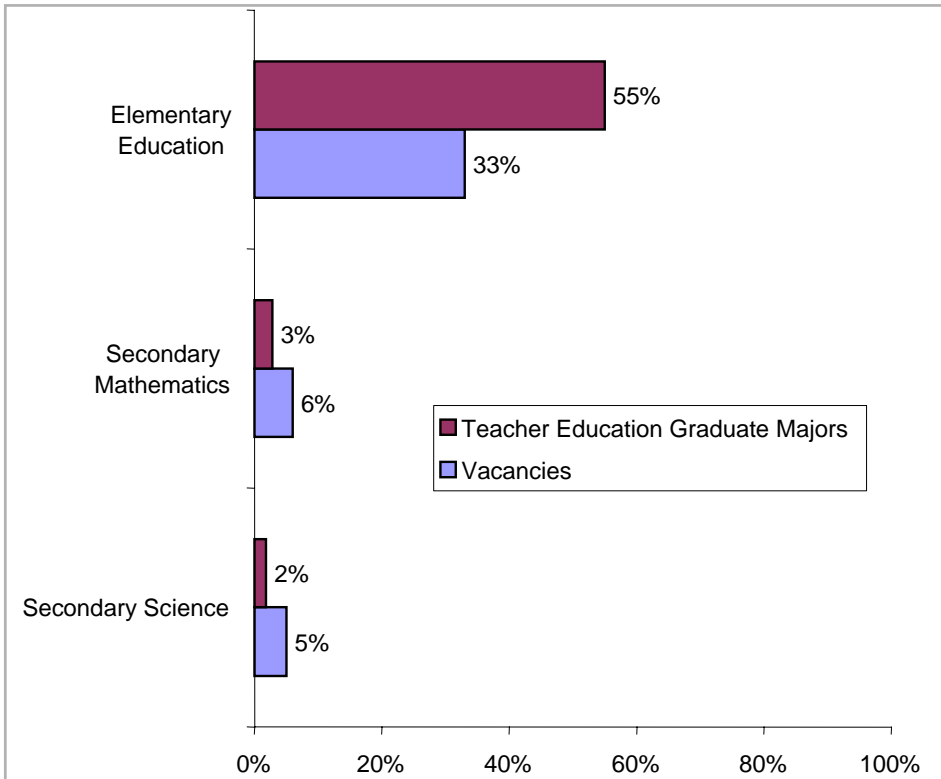
What They Say Would Encourage Them to Return (2)



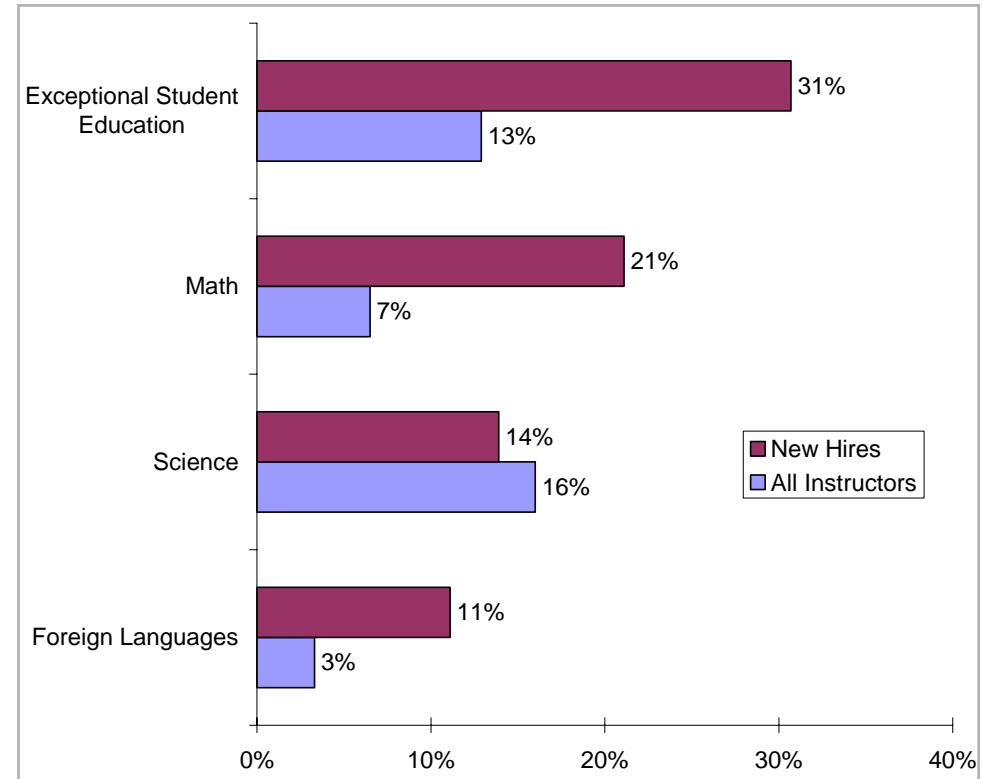
Sources: (1) Florida Department of Education;
(2) Florida Office of Economic and Demographic Research, *Teacher Survey*, April 2000

This shortage in Florida, as in the rest of the nation, is being felt most acutely in critical academic subjects.

Florida Teaching Vacancies Compared to Teacher Candidates in the Field (%s of Totals)



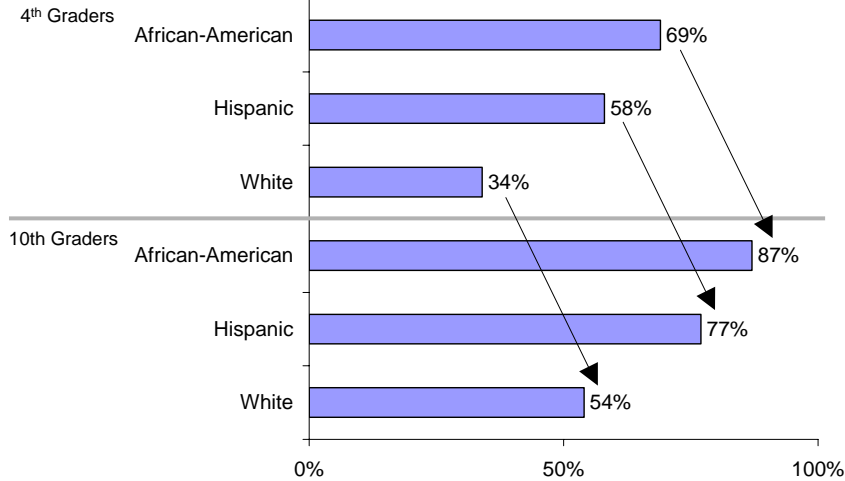
Current K-12 Instructors “Not Certified in the Field” in Which They Teach



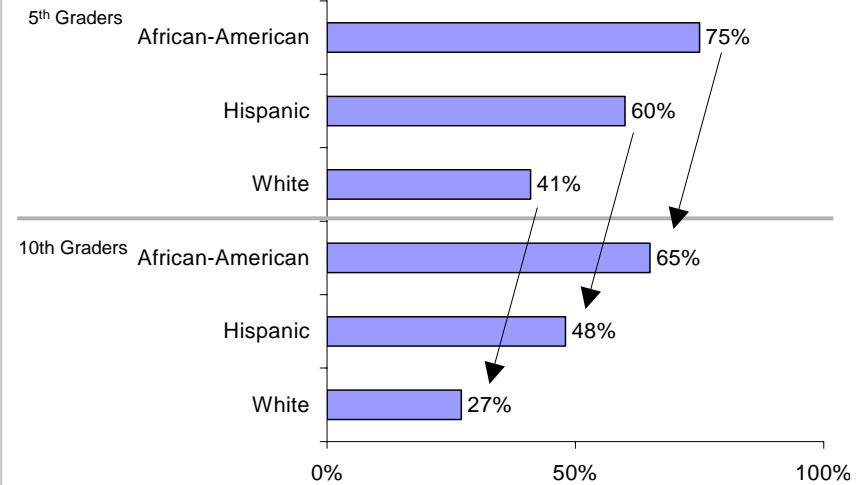
Source: Florida Dept. of Education, Office of Strategy Planning, *Critical Teacher Shortage Areas 2002-2003*, November 2001

Addressing a problem shared by states nationwide, Florida is aiming to close the gap in academic achievement between minority and non-minority students.

Students Scoring Below an Acceptable Level* in Reading

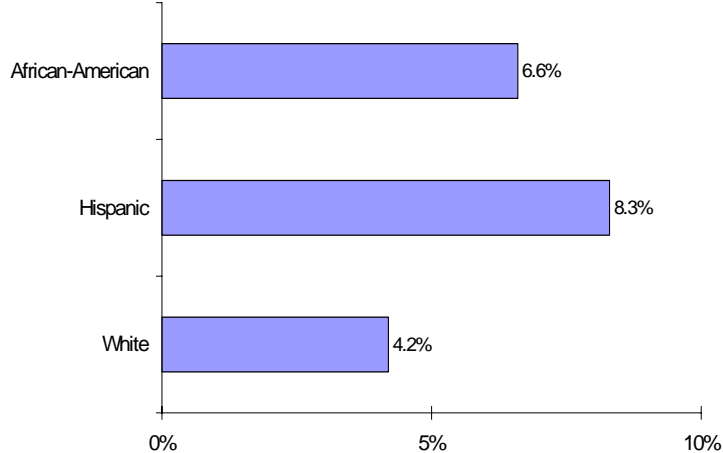


Students Scoring Below an Acceptable Level* in Math

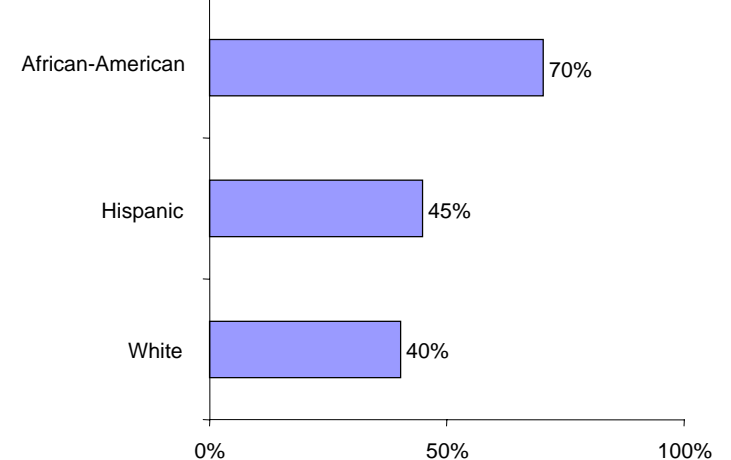


* "Below an acceptable level" is defined as scoring at FCAT Achievement Levels 1 or 2.

High School Drop-Out Rate



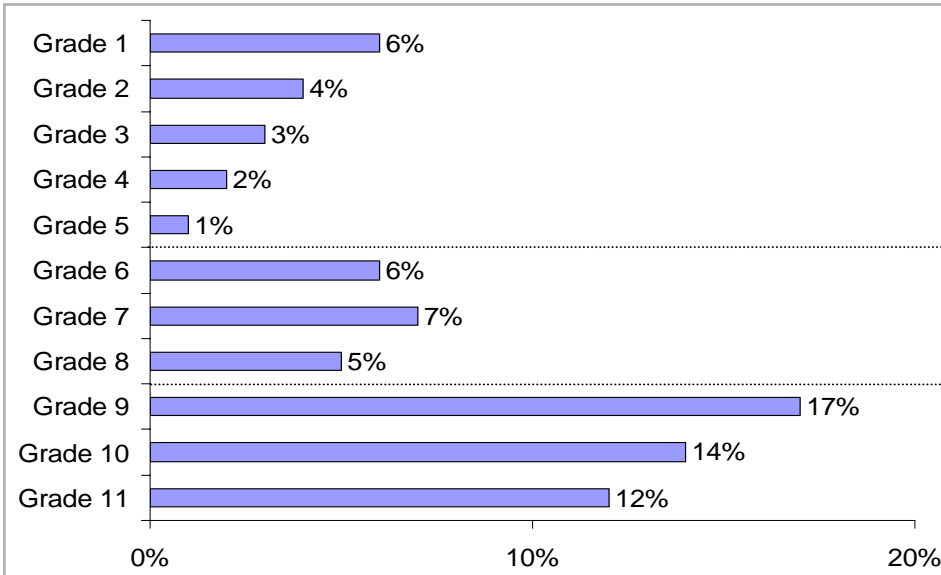
First-Year Community College Students Testing Not "College Ready"



Sources: Florida Dept. of Education, Florida Comprehensive Assessment Test, 2001; Education Information & Accountability Services, *Dropout Demographics in Florida's Public Schools*, September 2000; Florida Dept. of Education, *Readiness for College: Performance of 1998-99 Florida Public High School Graduates on Entry-Level College Placement Tests*, January 2001; and Accenture analysis

Even though a high proportion of Florida students repeat first, middle school, and high school grades, many still are ill-prepared for post-secondary education.

K-12 Students Retained Statewide, 1999 – 2000

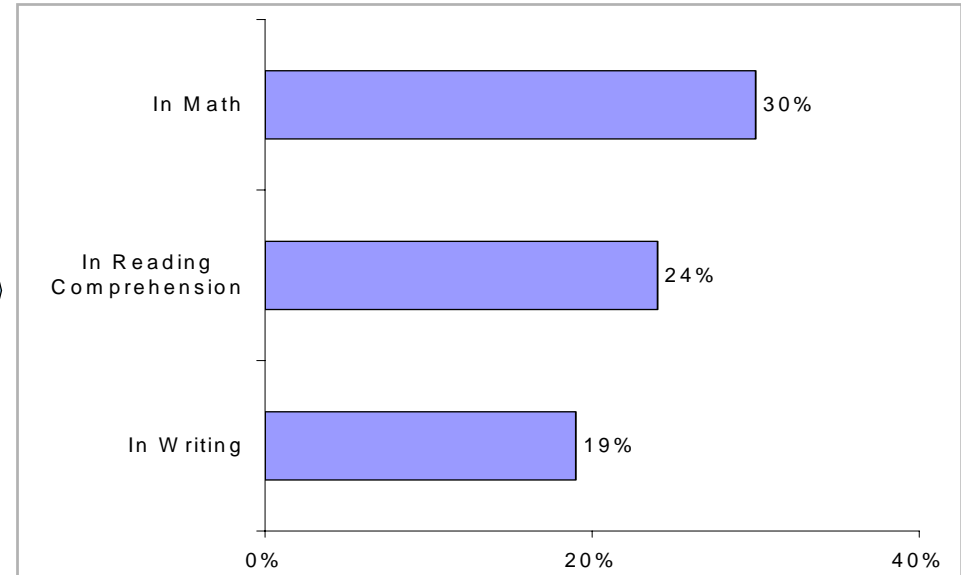


Implications:

- More students test below “proficient” than are retained
- Contrary to state law, social promotion continues to occur

Source: Southern Regional Education Board, *Finding Alternatives to Failure: Can States End Social Promotion and Reduce Retention Rates?* January 2001

First-Year Community College Students Not Testing “Ready,” 2000



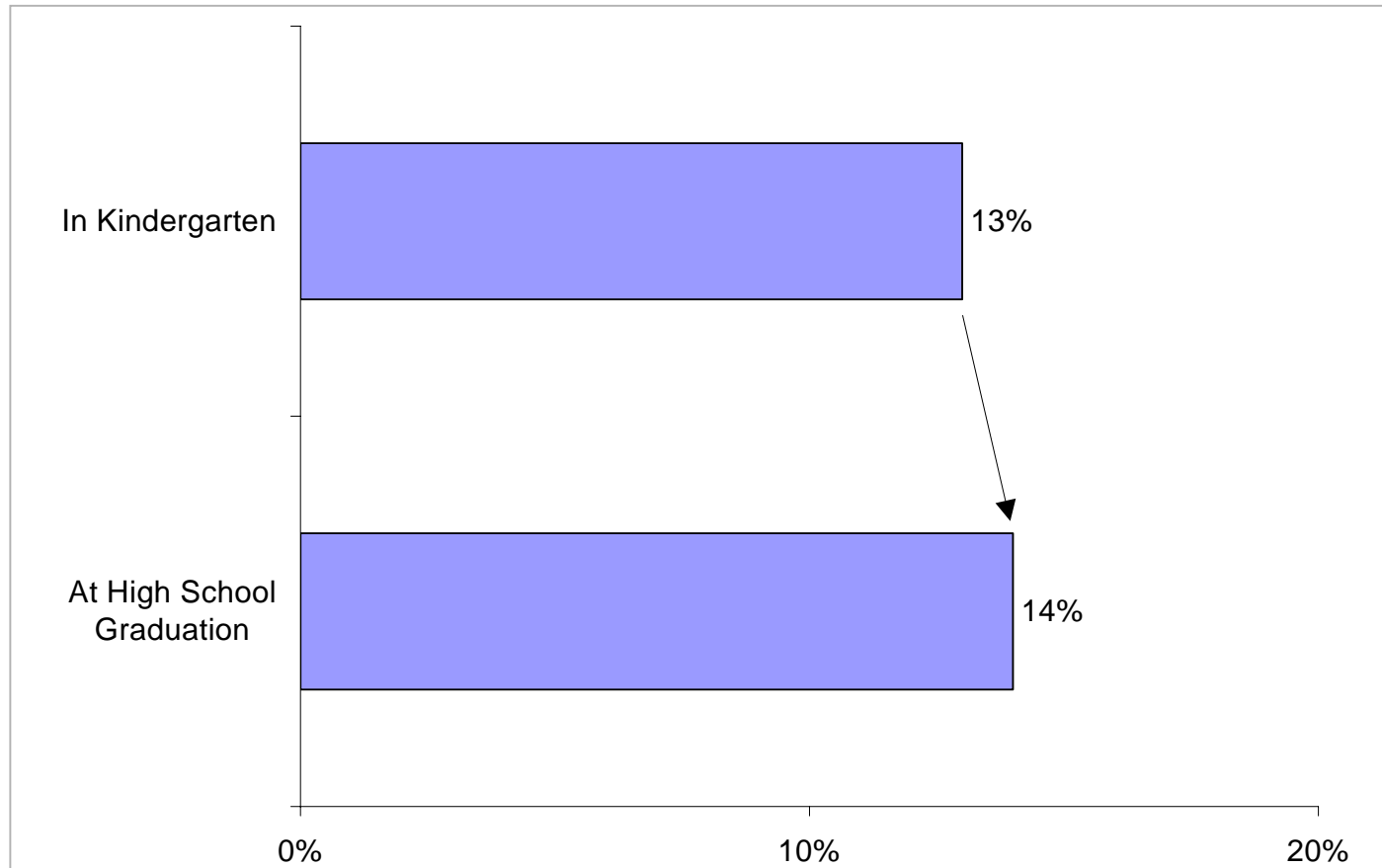
Implications:

- 60% of students required post-secondary remedial education
- The standard for receiving a high school diploma in Florida does not match the minimum standard for “college readiness”

Source: Florida Department of Education, *Readiness for College: Performance of 1998-99 Florida Public High School Graduates on Entry-Level College Placement Tests*, January 2001

On average, Florida students' prospects for going to college and earning a baccalaureate degree change little after kindergarten.

Likelihood That a Florida Student Will Go on to Earn a Four-Year Post-Secondary Degree



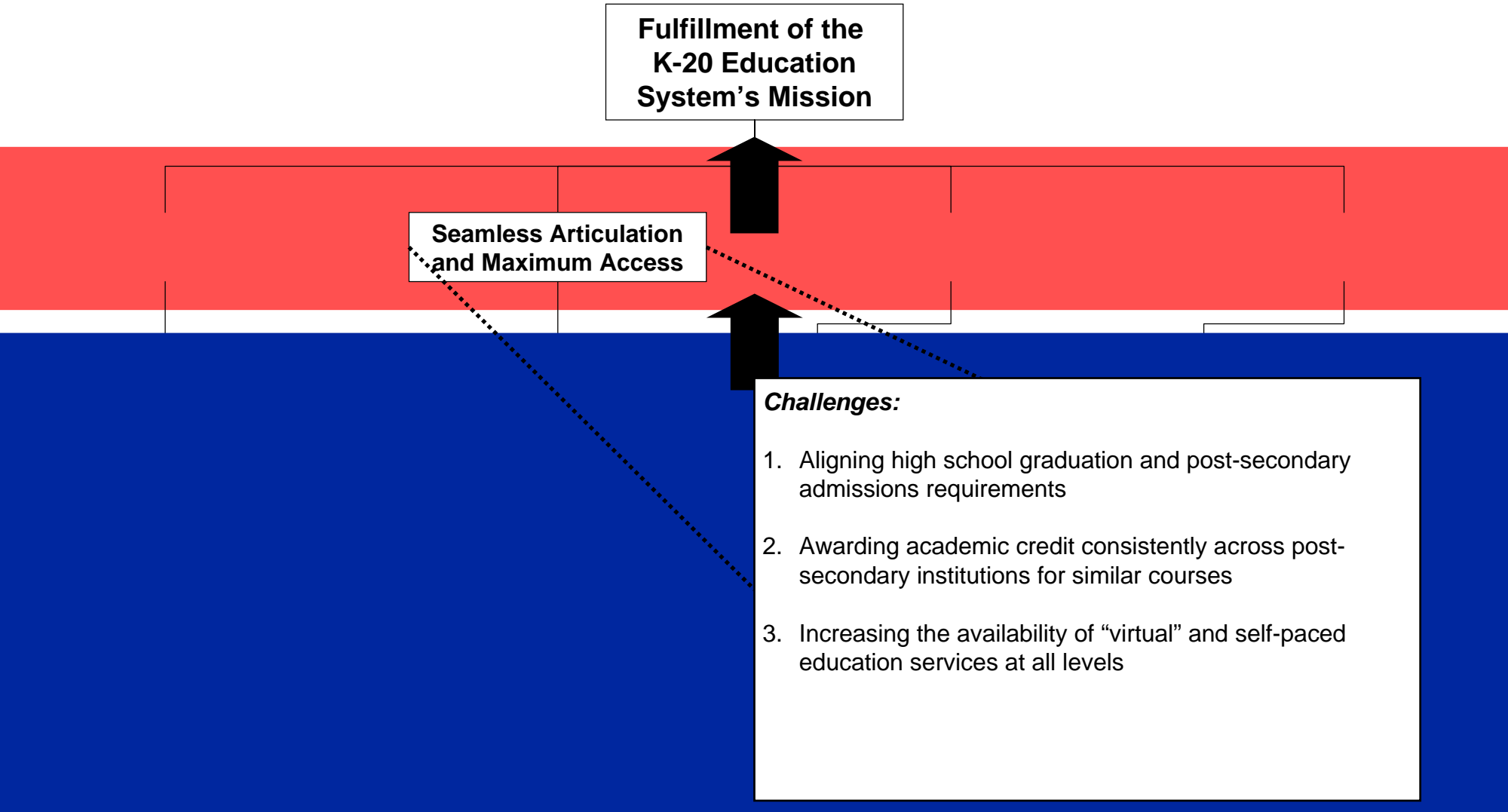
Source: Education Governance Reorganization Transition Task Force Briefing Materials, 2001

Like other large, fast-growing states, Florida is working to expand, repair, or upgrade many of its K-12 educational facilities.

National School Construction and Renovation Trends

- On average, public school buildings *nationwide* are 40 years old and have not been renovated for 11 years
- 75% of all school buildings nationwide are *not* rated in good condition, and more than 30% need extensive repair
- Florida, California, and Texas have the fastest growing school-age populations and lead in improving the quality of public educational facilities

Sources: National Center for Education Statistics, *Condition of America's Public School Facilities: 1999*, June 2000; and United States General Accounting Office, *School Facilities: America's Schools Report Differing Conditions*, June 1996



Poor alignment of K-12 exit requirements with post-secondary entrance requirements is the main challenge to attaining “Seamless Articulation and Maximum Access.”

Challenges to Attaining “Seamless Articulation and Maximum Access”

Why a Challenge?

1. **Aligning High School Graduation and Post-Secondary Admissions Requirements**

- Even Florida students completing the 19 required courses for the high school college preparatory curriculum are not necessarily prepared for post-secondary education

2. **Awarding Academic Credit Consistently Across Post-Secondary Institutions for Similar Courses**

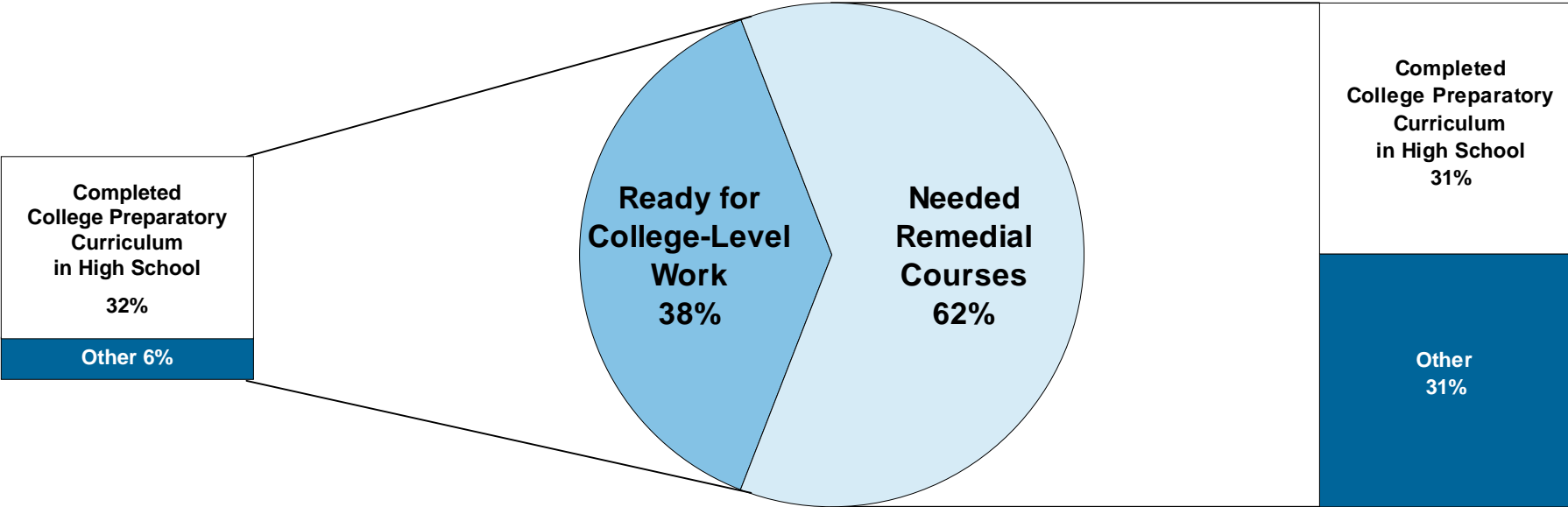
- Disparate state and local policies hinder articulation and access at all levels

3. **Increasing the Availability of “Virtual” and Self-Paced Education Services at All Levels**

- The K-20 Education System has a significant opportunity to expand its secondary and post-secondary online learning programs
-

Even Florida students completing the 19 required courses for the high school college preparatory curriculum are not necessarily prepared for post-secondary education.

Academic Readiness of Florida Public High School Graduates Beginning Post-Secondary Education in 1997-1998



Source: Florida Office of Educational Effectiveness and Research, *Prior-Year High School Graduates in the Florida Community College System, 1998*

Disparate state and local policies hinder articulation and access at all levels.

Salient Impediments to Articulation at Each Educational Level

Elementary School

- State involvement in curricular requirements must be balanced against local control of academic standards and classroom instruction

Middle School

- Lack of mandated middle school credit requirements frequently results in promotion of unprepared students

High School

- Graduation requirements do not align with SUS entrance requirements (e.g., for foreign languages)
- Students continue to graduate with standard diplomas while lacking the knowledge necessary to advance directly to college credit coursework
- Local policies may reduce the opportunity for students to access online services
- Credit for dual enrollment does not transfer consistently to all post-secondary institutions

Community College

- Course updates are not routinely provided to institutions, inhibiting the effective articulation of course credit
- By allowing non-prerequisite courses to proliferate, institutions fail to maintain the integrity of common prerequisites

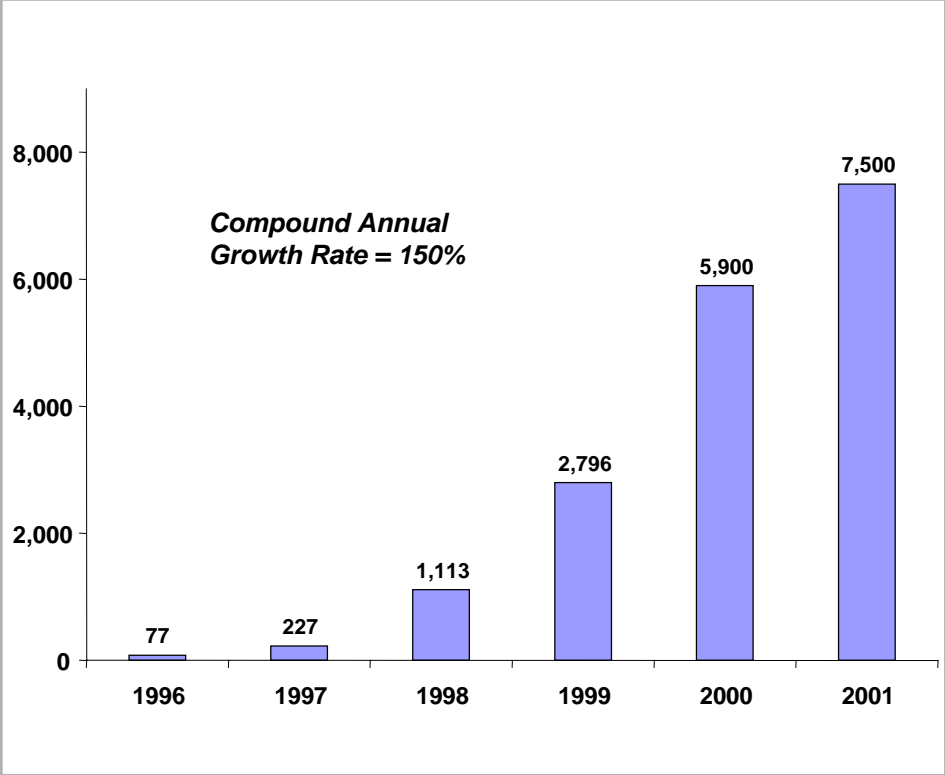
State University System

- Prohibitive costs may prevent prospective students from seeking a university education
 - System may be slow to recognize and accept distance learning credits
-

Source: Florida Dept. of Education, *K-20 Articulation: Policies, Procedures, and Challenges* (Unpublished), January 2002

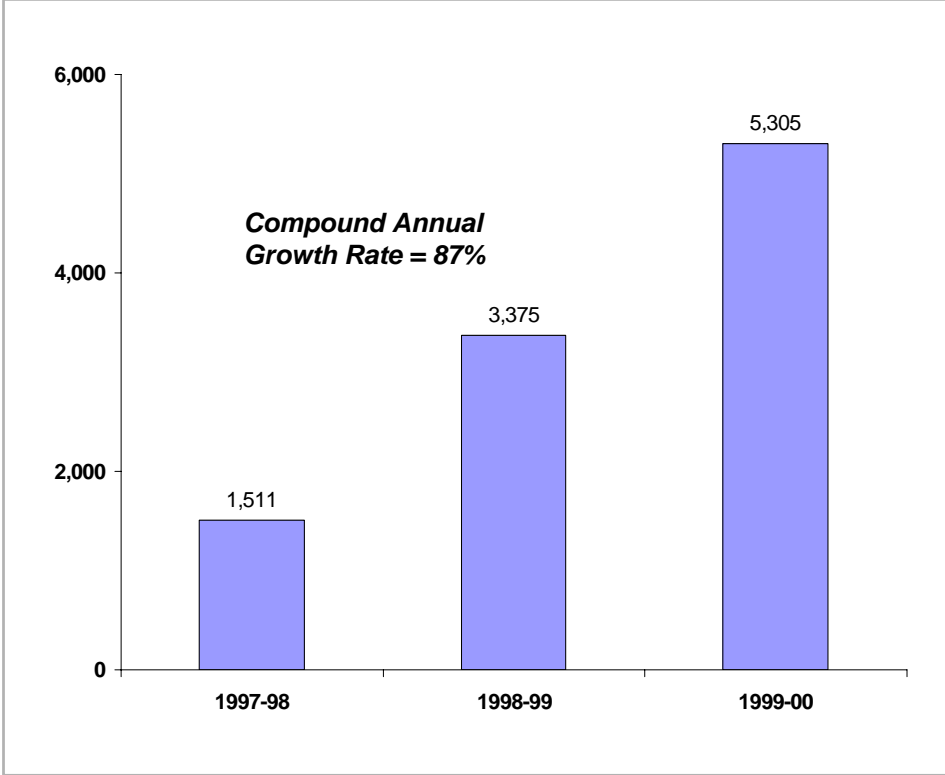
The K-20 Education System has a significant opportunity to expand its secondary and post-secondary online learning programs.

Florida Virtual High School Enrollment

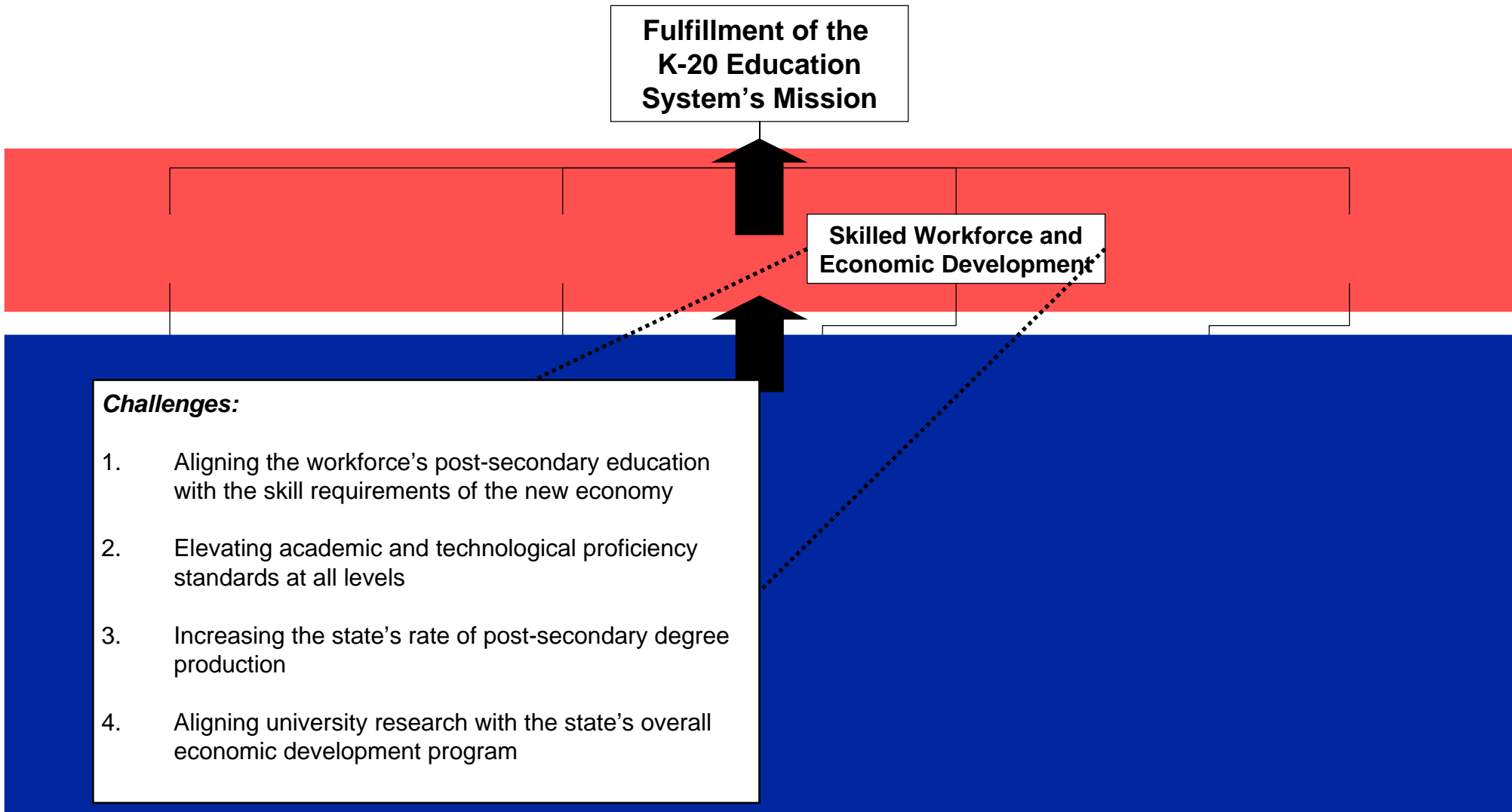


Source: Florida Virtual High School Website

SUS Students Pursuing Their Studies Only Through Distance Education



Source: Florida Division of Colleges and Universities



With regard to attaining a “Skilled Workforce” competitive in the new economy, post-secondary education in Florida is not well aligned with market requirements.

Challenges to Attaining “Skilled Workforce and Economic Development”

Why a Challenge?

1. Aligning the Workforce’s Post-Secondary Education With the Skill Requirements of the New Economy

- Economic growth and new jobs can be expected to go to the states best at fielding workforces with significant post-secondary education
- In 1996, Florida students were ranked in the bottom third nationally in subjects critical to success in the new economy
- Historically, the quality of education in Florida and the workforce it generates have made it difficult for companies to hire the skilled employees they need to grow

2. Elevating Academic and Technological Proficiency Standards at All Levels

- Florida K-12 instructors use information technology in the classroom regularly, but have little formal training despite state investment in professional development

3. Increasing the State’s Rate of Post-Secondary Degree Production

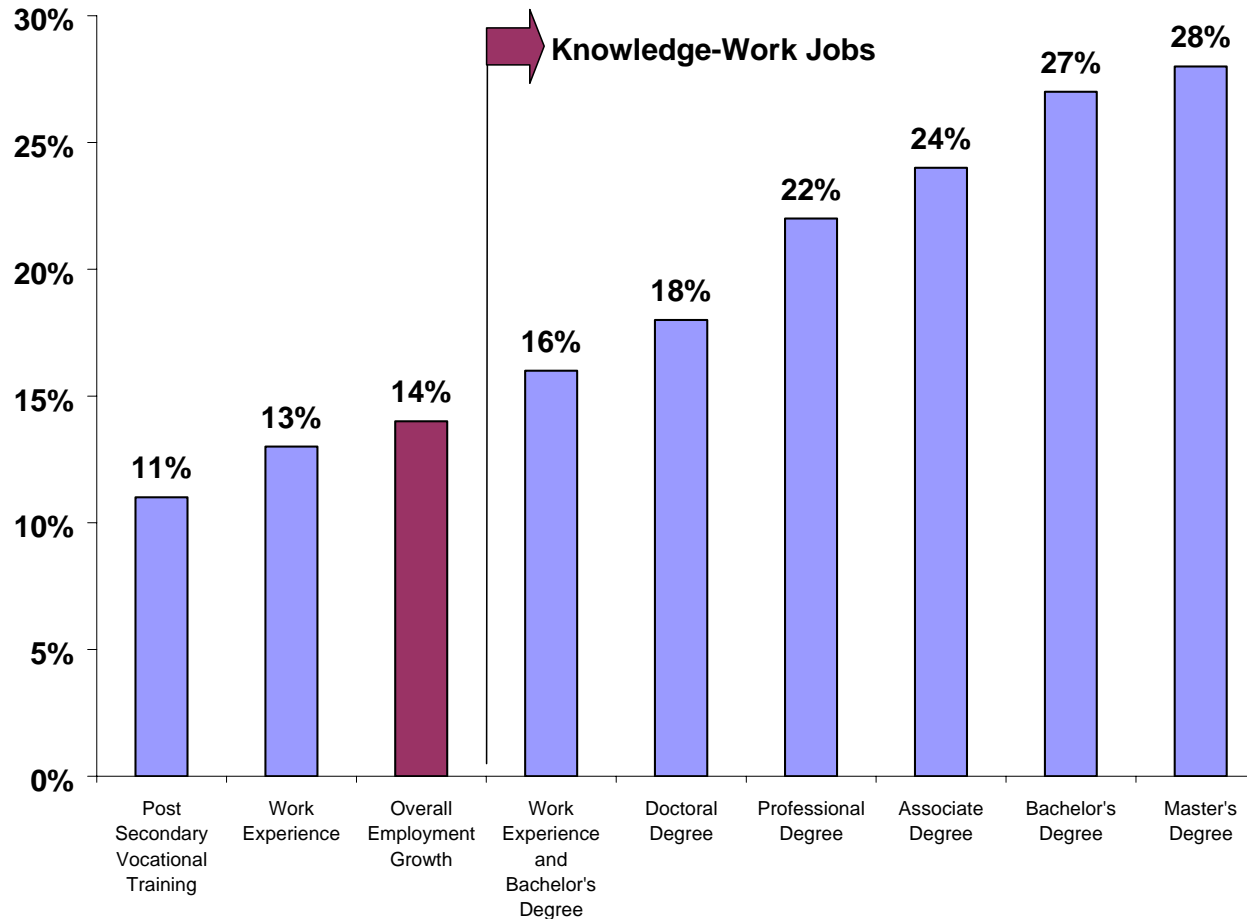
- Florida students’ rate of continuation into post-secondary education is low, which puts the state at a competitive disadvantage

4. Aligning University Research With the State’s Overall Economic Development Program

- Florida lags behind its competitors in using the state’s university system as an engine for economic development

Economic growth and new jobs can be expected to go to the states best at fielding workforces with significant post-secondary education ...

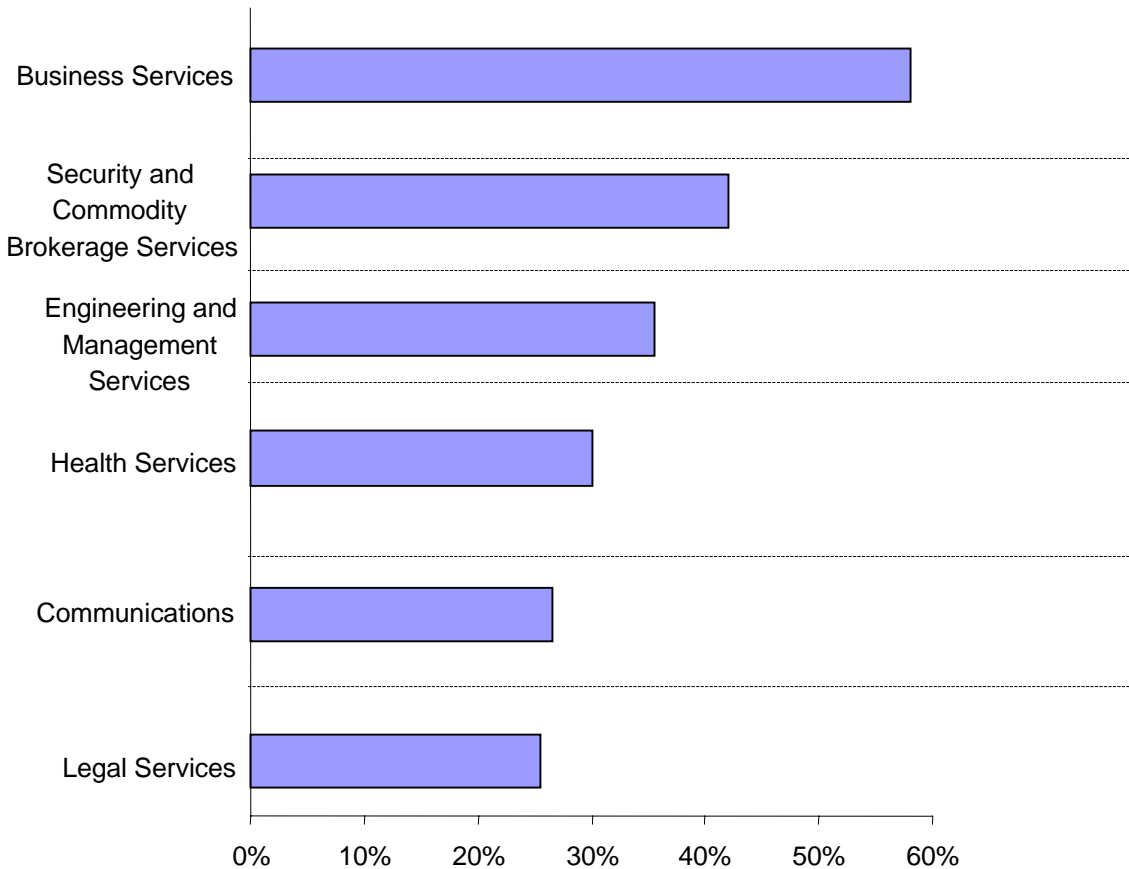
US Job Growth by Education and Training Requirements, 1994 – 2005E



Source: Employment Outlook, 1994-2005

... especially in the high-growth and relatively high-paying business technology, securities, engineering, and healthcare industries.

Projected Job Growth in Florida's Fastest-Growing Industries, 2001-2008



Projected Salary Growth in Florida in Representative Occupations, 2001-2008

Occupation	Change in Base Salary
Computer Support Specialist	106%
Systems Analyst	94%
Securities, Financial Services Sales Professional	47%
Computer Engineer	73%
Surgical Technician	67%
Medical Assistant	61%
Physician Assistant	55%
Respiratory Therapist	54%
Instructional Coordinator	63%
Paralegal	67%

Source: Florida Agency for Workforce Innovation, *Florida Industry and Occupational Projections to 2008*, 2001 Edition

In 1996, Florida students were ranked in the bottom third nationally in subjects critical to success in the new economy.

Students Testing “Proficient” in 1996 on National Assessment of Educational Progress Tests

In Math

In Science

	Percent	Rank		Percent	Rank
	34%	1		41%	1
Minnesota	33%	2	Maine	41%	2
North Dakota	32%	3	Montana	41%	3
Connecticut	32%	4	North Dakota	39%	4
Montana	32%	5	Wisconsin	37%	5
Wisconsin			Massachusetts		

Bottom Third*	17%	28	Arkansas	22%	28
California	17%	29	Tennessee	22%	29
Florida	17%	29	Delaware	21%	30
Georgia	16%	30	Florida	21%	31
Hawaii	16%	31	Georgia	21%	32
Kentucky	16%	32	West Virginia	21%	33
West Virginia	15%	33	California	20%	34
Tennessee	15%	34	New Mexico	19%	35
New Mexico	14%	35	Alabama	18%	36
South Carolina	14%	36	South Carolina	17%	37
Arkansas	13%	37	Hawaii	15%	38
Alabama	12%	38	Louisiana	13%	39
Louisiana	7%	39	Mississippi	12%	40
Mississippi	7%	40			

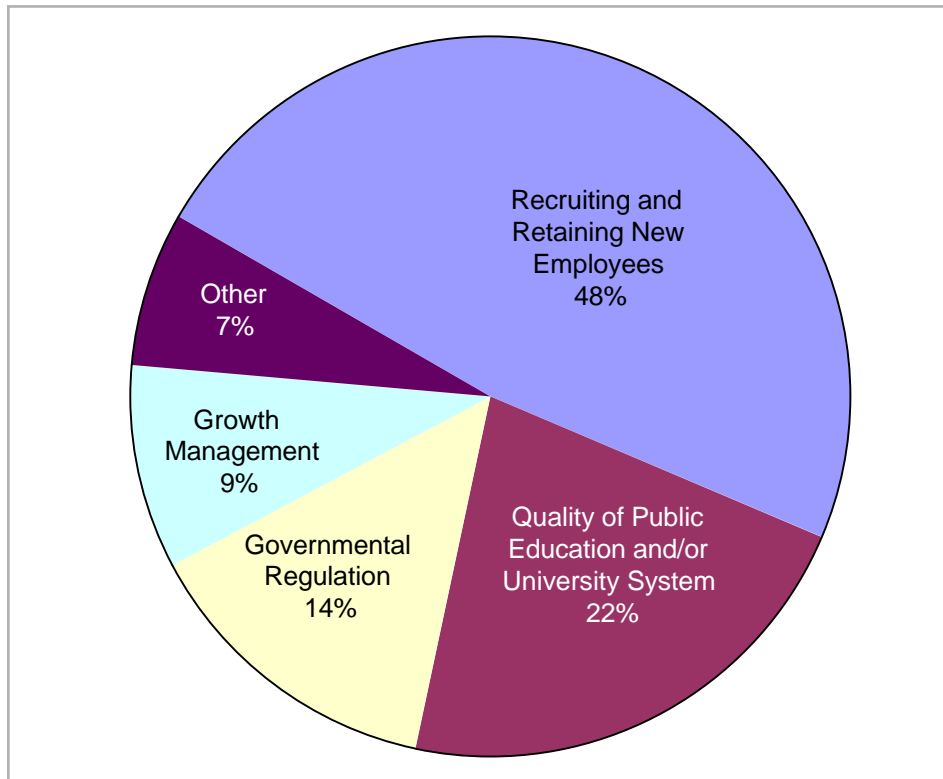
* Out of 40 states participating

Note: 1996 is the last year in which NAEP math and science tests were administered to K-12 students in Florida.

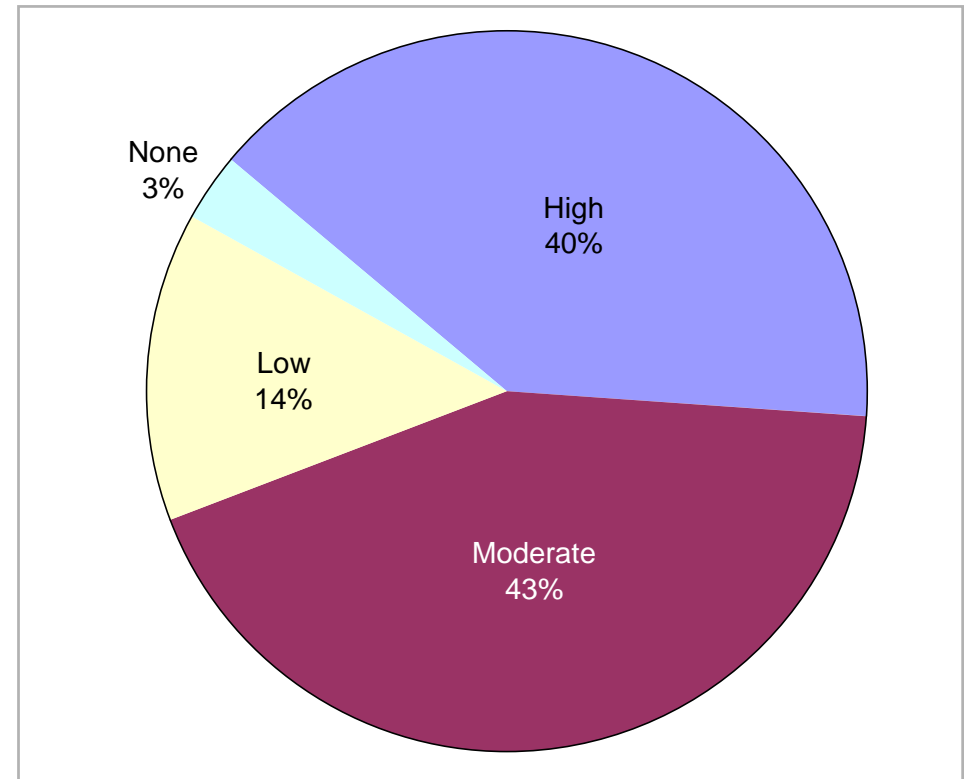
Source: National Center for Education Statistics

Historically, the quality of education in Florida and the workforce it generates have made it difficult for companies to hire the skilled employees they need to grow.

Biggest Challenges Facing Florida Businesses*



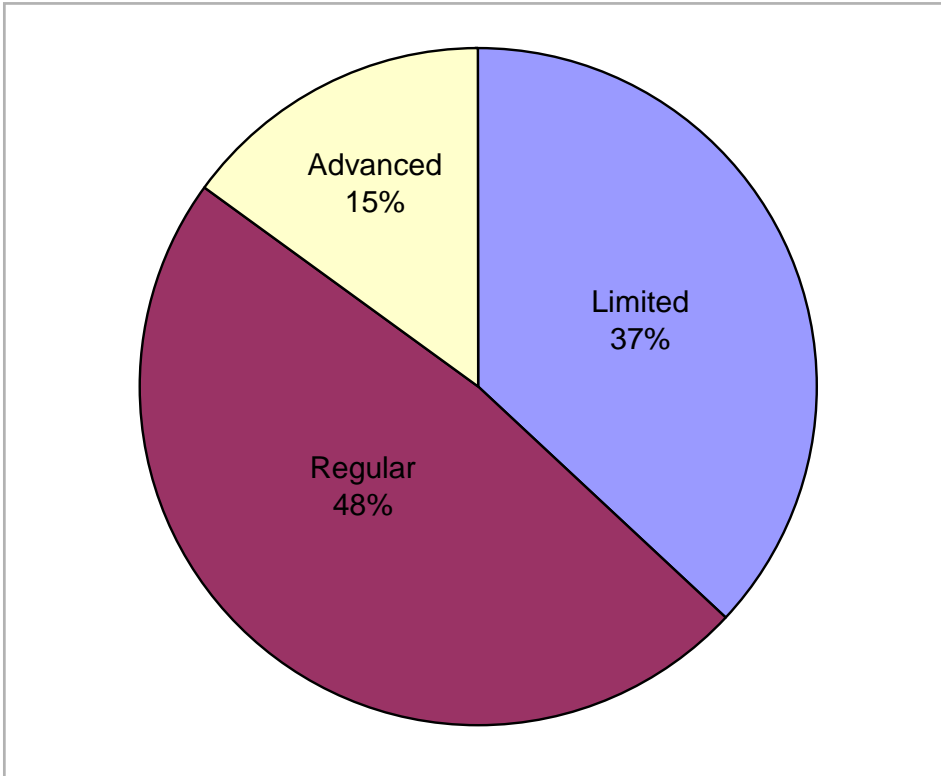
Level of Difficulty Florida Companies Have In Finding Employees With the Right Skills*



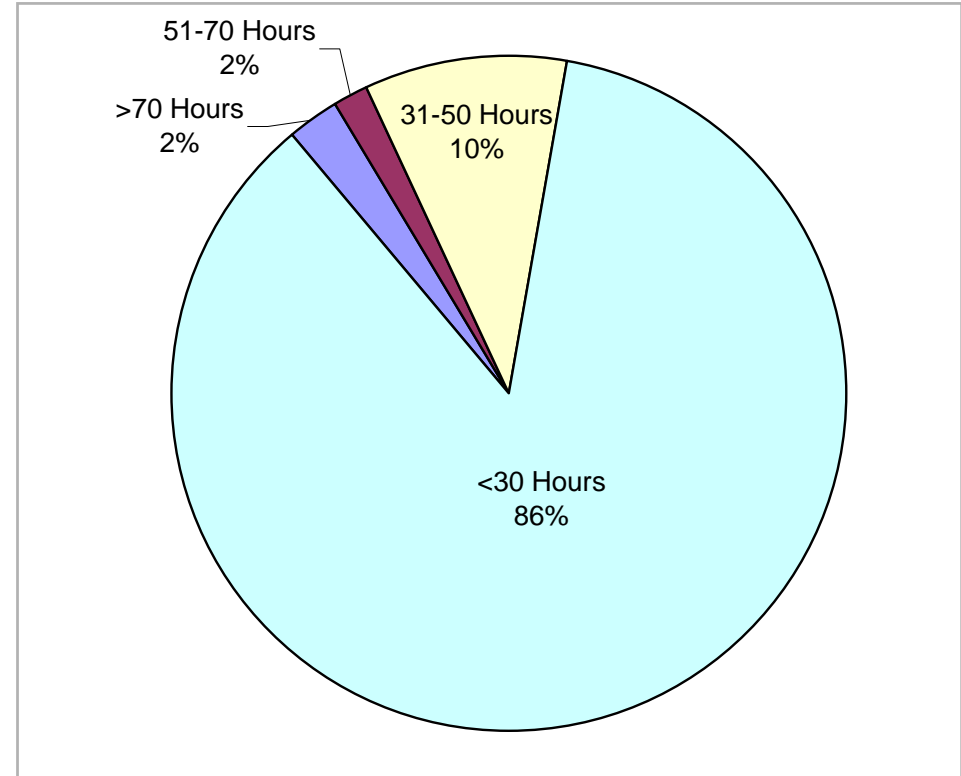
*According to Florida CEOs surveyed.

Florida K-12 instructors use information technology in the classroom regularly, but have little formal technology training despite state investment in professional development.

Level of K-12 Instructors' Use of Information Technology in the Classroom*



Amount of K-12 Instructors' Technology-Related Professional Development

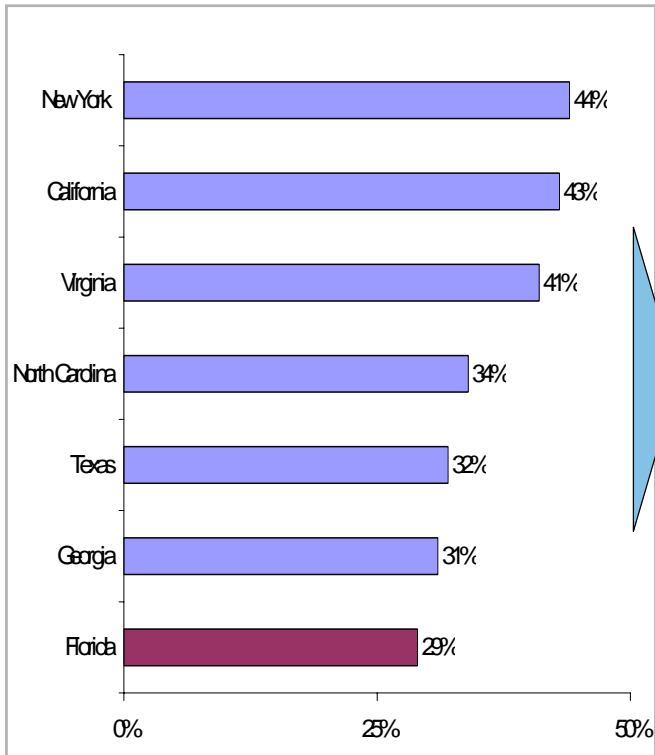


* Category labels adapted from *Milken Professional Competency Continuum's* "Stages of Progress"

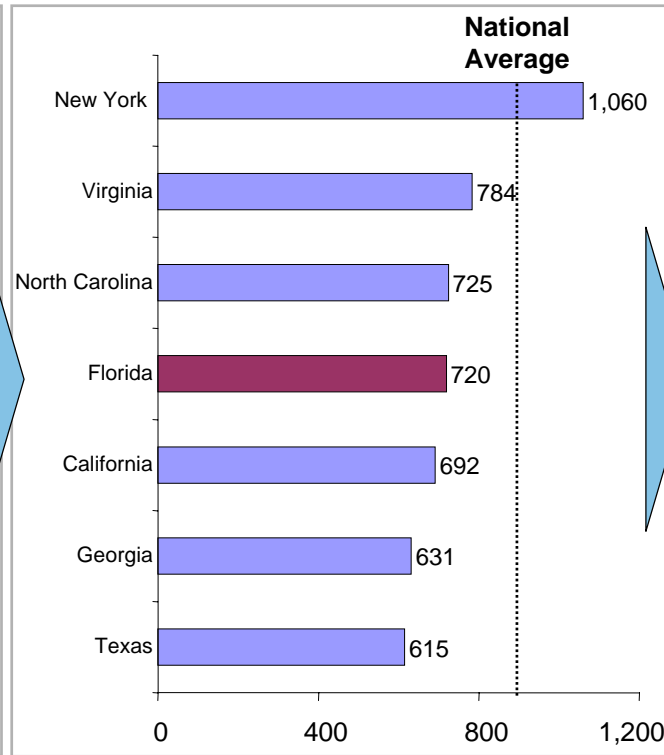
Source: Florida Department of Education, *Technology Resources Survey of 3,177 Florida Public Schools (Unpublished)*, 2001

Florida students' rate of continuation into post-secondary education is low, which puts the state at a competitive disadvantage.

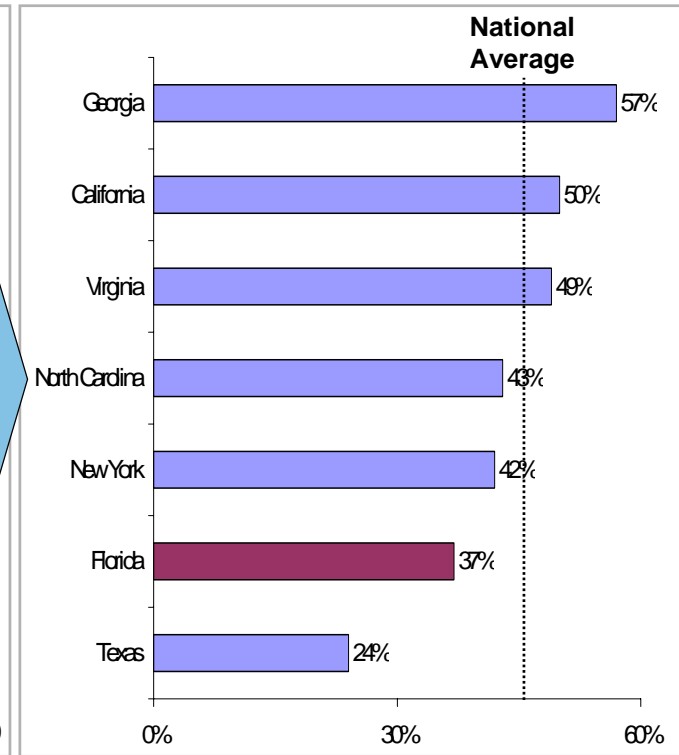
Likelihood That a High School Freshman Will Graduate and Enroll in Post-Secondary Education



Post-Secondary Degrees Conferred Per 100,000 Residents, 1998



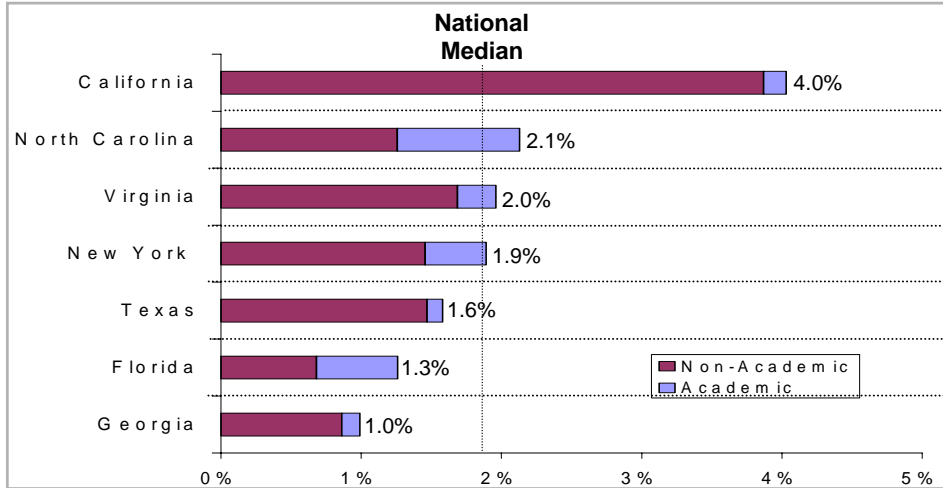
Employers Satisfied With Post-Secondary Preparation of Their Employees



Sources: National Center for Education Statistics; Measuring Up 2000: The State-by-State Report Card for Higher Education

Florida lags behind its competitors in using the State's university system as an engine for economic development.

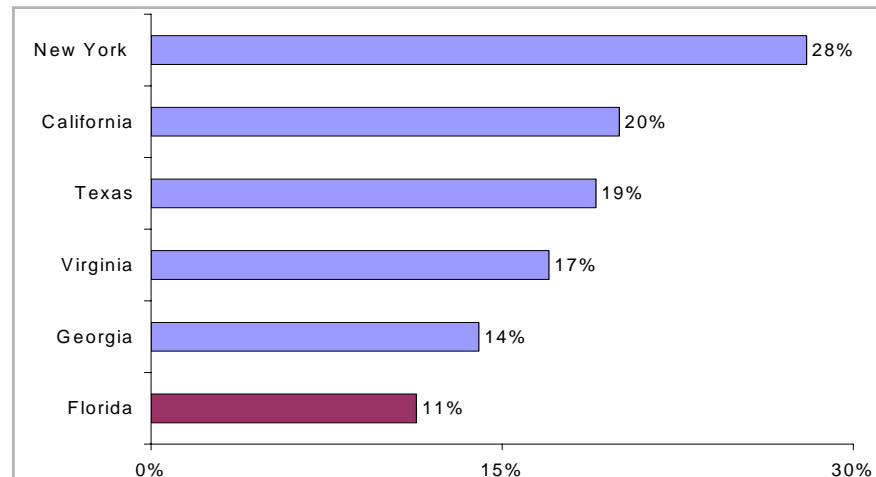
R&D as a Percentage of Annual Gross State Product



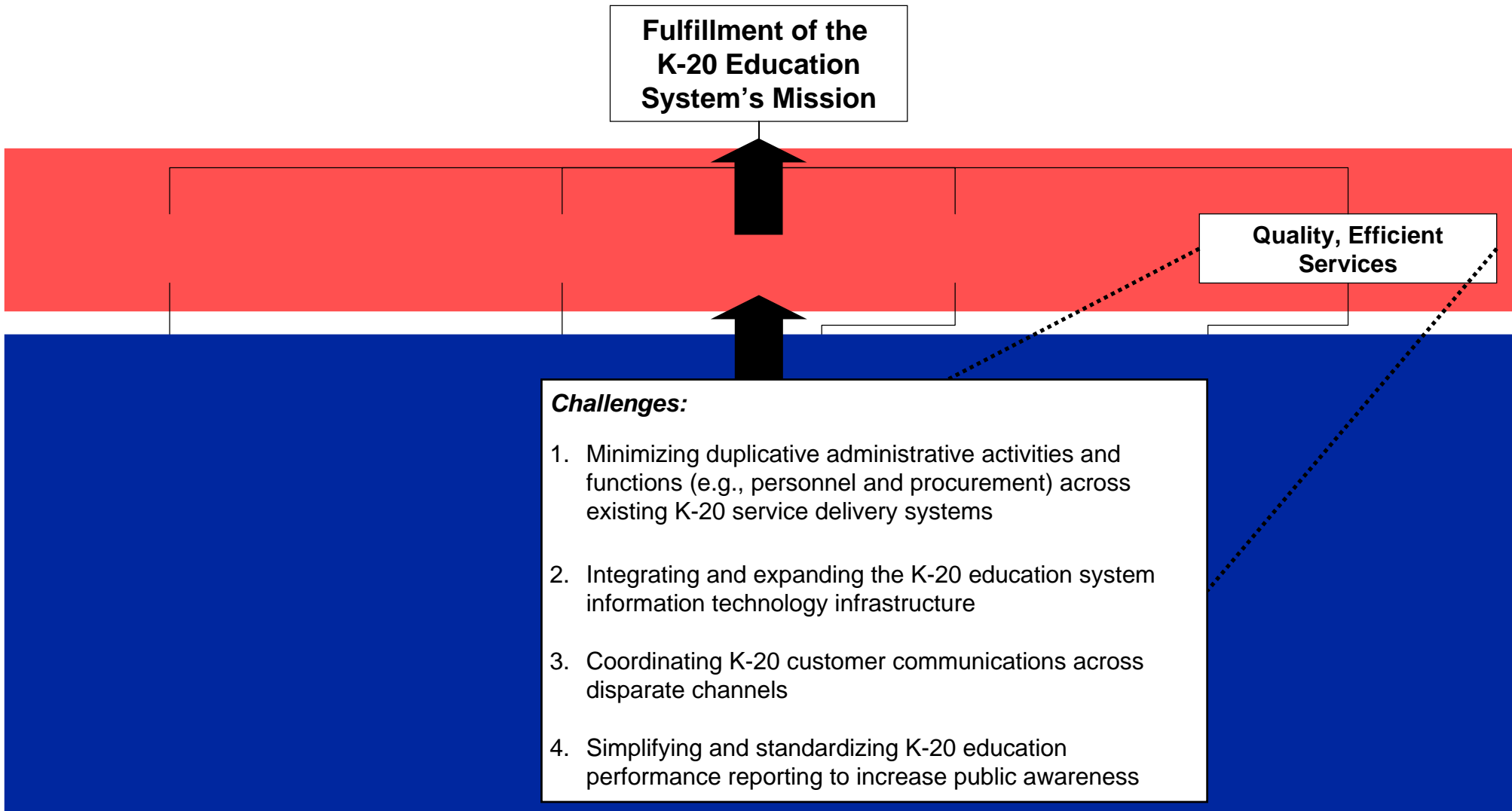
Annual Academic R&D Spending (\$Ms)

	Total	Contributed by:		
		Government	Industry	Other
California	\$3,657	\$2,364	\$249	\$1,044
North Carolina	\$1,011	\$659	\$179	\$173
Virginia	\$531	\$358	\$49	\$24
New York	\$2,063	\$1,418	\$101	\$544
Texas	\$1,828	\$1,158	\$160	\$510
Florida	\$786	\$487	\$63	\$236
Georgia	\$838	\$454	\$90	\$294

Percentage of All State Patents Earned by Post-Secondary Institutions



Sources: National Science Foundation, *Academic Research and Development Expenditures, 1998 & 1999*; United States Dept. of Commerce, Patent and Trademark Office



Fragmented and uncoordinated administrative systems pose a significant challenge to attaining the goal of “Quality, Efficient Services.”

Challenges to Attaining “Quality, Efficient Services”

Why a Challenge?

1. Minimizing Duplicative Administrative Activities and Functions (e.g., personnel and procurement) Across Existing K-20 Service Delivery Systems

- Florida’s K-20 Education System uses multiple information and resource management systems that duplicate one another in many functional areas

2. Integrating and Expanding the K-20 Education System Information Technology Infrastructure

- The K-20 Education System has no enterprise-wide IT strategy, which increases operating costs and risk and impedes coordination

3. Coordinating K-20 Customer Communications Across Disparate Channels

- K-20 Education System customers currently have to obtain information and conduct routine business through numerous, uncoordinated channels

4. Simplifying and Standardizing K-20 Education Performance Reporting to Increase Public Awareness

- The A+ Program is a model accountability program for K-12 education in Florida, but this approach has yet to be adapted fully to post-secondary education

Florida's K-20 Education System uses multiple information and resource management systems that duplicate one another in many functional areas.

Current Situation for K-20 Education System Administrative Functions

Leading Issues

General Services

- Disparate internal services (e.g., mail, print and publication services) operate throughout the new K-20 system
- Many of these operations are generic and could be consolidated

Human Resources

- Each K-20 delivery system has its own personnel program
- The different programs' benefits and pay scales are not aligned with one another
- To integrate K-20 HR administration with a new statewide program, DOE may first have to merge these different personnel programs

Procurement

- Each K-20 service delivery system has its own procurement operation
 - To integrate K-20 procurement with a new statewide operation, DOE may have to explore purchasing consolidation and strategic sourcing options first
-

The K-20 Education System has no enterprise-wide IT strategy, which increases operating costs and risk and impedes coordination.

Issues Stemming From Lack of a K-20 Information Technology Plan

Implications

Disjointed IT Management, Acquisition, and Delivery Systems

- No enterprise-wide IT budget
- Limited accountability for IT results and cost
- Lost opportunity for volume discounts in purchasing
- Little coordination of IT initiatives among divisions
- Increased personnel costs to manage disparate systems

Lack of System-wide IT Standards

- Lack of system inter-operability and scalability
- No guidelines for product selection
- Disaster risk due to disparate contingency plans
- High security risks due to lack of security policies and standards

Multiple, Duplicative Data Centers

- Lost opportunity for economies of scale through shared hardware, personnel, and licenses
- Duplication of personnel effort and limited coordination for management and development

Redundant, Antiquated Data Transport Infrastructure Services

- Duplicative services and poor inter-organizational communication
- Expensive to integrate new systems into outdated infrastructure
- Inability to take full advantage of state government-wide data transport systems (e.g., SUNCOM)

K-20 Education System customers currently have to obtain information and conduct routine business through numerous, uncoordinated channels.

Overview of K-20 Education System Customer Communications

	Examples	Current Complications
K-20 Education System Customers	<ul style="list-style-type: none"> ■ Students ■ Parents/Guardians ■ Teachers ■ Media ■ Legislature 	<ul style="list-style-type: none"> ■ Fragmented communication between customers and staff ■ Traditional 9:00 to 5:00 access to services in most cases
Access Channels	<ul style="list-style-type: none"> ■ In-Person ■ Telephone ■ Physical Mail ■ E-mail ■ Internet 	<ul style="list-style-type: none"> ■ K-20 delivery systems maintain separate communication infrastructures (e.g., e-mail, telephones, etc.) ■ Separate application development processes and dedicated staff within each K-20 delivery system
Required Information	<ul style="list-style-type: none"> ■ Transcripts ■ Financial Aid ■ Registration ■ Course Listings ■ Career Planning ■ Academic Advice ■ Fees and Payments 	<ul style="list-style-type: none"> ■ Fragmented processes inhibit data sharing among state agencies and educational institutions ■ Inability to establish a “one-stop shop” for meeting customers’ information needs

The A+ Program is a model accountability program for K-12 education in Florida, but this approach has yet to be adapted fully to post-secondary education.

Comparison of Current K-20 Education System Accountability Efforts

Critical Accountability Program Feature	K-12 A+ Program	SUS and Community Colleges
Outcome Measures Selected Through a Public, Collaborative Process	●	
Outcome Data Collected Systematically Across Institutions	●	●
Comparison Across Institutions on Relevant Measures	●	●
Comprehensible Accountability Information	●	
Results Reported Publicly	●	
Rewards Clearly Communicated and Meaningful to Recipients (e.g., funding, waivers, etc.)	●	●

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- Goal Definitions

- Causal Models

- Challenges

- **Imperative Selection**

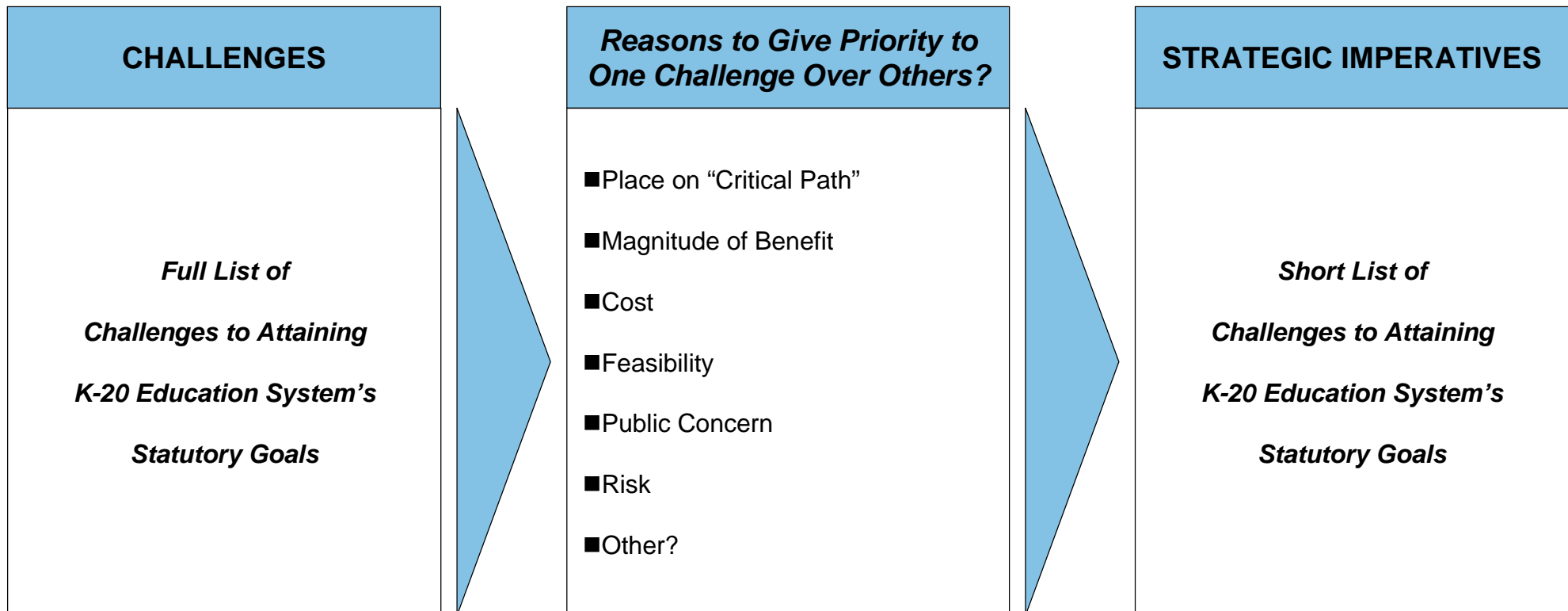
- Appendix

Each challenge facing the K-20 Education System could, by itself, fully occupy the attention and resources of the Board of Education and the Department of Education.

Challenges Facing Florida’s K-20 Education System

Highest Student Achievement	Seamless Articulation and Maximum Access	Skilled Workforce and Economic Development	Quality, Efficient Services
<ul style="list-style-type: none"> ■ Increasing the supply of qualified K-12 instructors ■ Applying existing academic standards at all levels consistently ■ Emphasizing preparation of K-12 students, especially low-income and minority students, for post-secondary education ■ Continuing to improve K-12 educational facilities state-wide to accommodate a growing student population 	<ul style="list-style-type: none"> ■ Aligning high school graduation and post-secondary admissions requirements ■ Awarding academic credit consistently across post-secondary institutions for similar courses ■ Increasing the availability of “virtual” and self-paced education services at all levels 	<ul style="list-style-type: none"> ■ Aligning the workforce’s post-secondary education with the skill requirements of the new economy ■ Elevating academic and technological proficiency standards at all levels ■ Increasing the state’s rate of post-secondary degree production ■ Aligning university research with the state’s overall economic development program 	<ul style="list-style-type: none"> ■ Minimizing duplicative administrative activities and functions (e.g., personnel and procurement) across existing K-20 service delivery systems ■ Integrating and expanding the K-20 education system information technology infrastructure ■ Coordinating K-20 customer communications across disparate channels ■ Simplifying and standardizing K-20 education performance reporting to increase public awareness

Taking on all challenges at once would likely result in not addressing any very well; therefore, the Board should narrow its focus to only a few *strategic imperatives*.



To help the Board focus, each member should rank the challenges facing the K-20 Education System in two ways.

Worksheet for Ranking K-20 Education System Challenges

Statutory Goal	Challenge	Ranks:	
		Absolute	Within Goal Category
Highest Student Achievement	▪ Increasing the supply of qualified K-12 instructors		
	▪ Applying existing academic standards at all levels consistently		
	▪ Emphasizing preparation of K-12 students, especially low-income and minority students, for post-secondary education		
	▪ Continuing to improve K-12 educational facilities statewide to accommodate a growing student population		
Seamless Articulation and Maximum Access	▪ Aligning high school graduation and post-secondary admissions requirements		
	▪ Awarding academic credit consistently across post-secondary institutions for similar courses		
	▪ Increasing the availability of “virtual” and self-paced education services at all levels		
Skilled Workforce and Economic Development	▪ Aligning the workforce’s post-secondary education with the skill requirements of the new economy		
	▪ Elevating academic and technological proficiency standards at all levels		
	▪ Increasing the state’s rate of post-secondary degree production		
	▪ Aligning university research with the state’s overall economic development program		
Quality, Efficient Services	▪ Minimizing duplicative administrative activities and functions (e.g., personnel and procurement) across existing K-20 service delivery systems		
	▪ Integrating and expanding the K-20 education system information technology infrastructure		
	▪ Coordinating K-20 customer communications across disparate channels		
	▪ Simplifying and standardizing K-20 education performance reporting to increase public awareness		

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- **Appendix**

Each goal definition should articulate specific characteristics and imply the Board’s intended outcomes and expected signs of progress.

K-20 Education System Goal Definitional Elements

	Defining Characteristics	Primary Implications	Observable Progress Indications
<i>Refers to:</i>	Main Themes	Desired Outcomes	Key Evidence of Success
<i>Answers the Question:</i>	What does the Board care about most in relation to the goal?	Generally speaking, what will success look like in relation to the goal?	How will the public know if progress is being made in relation to the goal?

The main characteristics of “Highest Student Achievement” entail tough academic standards that will require students to be prepared *before* they can advance.

Definitional Elements of “Highest Student Achievement”

Defining Characteristic	Primary Implications	Progress Indications
Attainment of Rigorous Academic Standards	<ul style="list-style-type: none"> ■ All students will demonstrate mastery of required knowledge and skills at each level of the K-20 system <i>before</i> being promoted to the next 	<ul style="list-style-type: none"> ■ The proportion of students who are “ready to learn” at the start of each level will increase ■ Average FCAT scores at all levels will increase ■ The incidence of social promotion will decline
Timely Advancement to High School Graduation	<ul style="list-style-type: none"> ■ Most students will make major academic transitions (e.g., from elementary to secondary school, and H.S. graduation) by the customary ages or earlier ■ Through secondary school, virtually all students who make a major academic transition will continue to the next 	<ul style="list-style-type: none"> ■ The proportion of students who leave school for reasons other than moving away from Florida will decline ■ The proportion of students who graduate from high school and post-secondary education programs “on time” will increase
Qualification for Post-Secondary Education ... or Skilled Employment (after high school graduation)	<ul style="list-style-type: none"> ■ Virtually all H.S. graduates will have both marketable skills for the current economy and minimum qualifications for post-secondary education leading to a bachelor’s degree 	<ul style="list-style-type: none"> ■ The proportion of first-year post-secondary students requiring remedial education services will decline ■ The proportion of employers reporting satisfaction with K-20 system graduates’ preparation for employment will increase

The characteristics of “Seamless Articulation” should reinforce the requirement that students meet high standards and encourage them to continue beyond high school.

Definitional Elements of “Seamless Articulation and Maximum Access”

Defining Characteristic	Primary Implications	Progress Indications
Compatible Curricula and Standards Consistently Applied	<ul style="list-style-type: none"> ■ K-20 curricula and academic level entry/ exit requirements will be developed by cross-level committees, including representatives from the K-8, 9-12, and 13-20 levels ■ All students who graduate from high school in Florida will meet basic entry and placement requirements for post-secondary education 	<ul style="list-style-type: none"> ■ The proportion of first-year post-secondary students who require remedial education services will decrease ■ Credit for similar courses of study will transfer smoothly between post-secondary institutions
Students’ Interest in and Qualification for ... Post-Secondary Education [Increases]	<ul style="list-style-type: none"> ■ K-12 course content and instructional methods will promote skills critical for success in post-secondary institutions ■ Continuation of education beyond the secondary level will be assumed by students, parents, and teachers ■ Post-secondary education will be made affordable for all students who qualify for it 	<ul style="list-style-type: none"> ■ The proportion of parents and students who report satisfaction with their secondary education will increase ■ The proportion of H.S. graduates who enroll in post-secondary education immediately after they graduate will increase ■ The number of Bright Futures Scholarships awarded annually will increase

The defining characteristics of “Skilled Workforce” require ongoing examination of the direction of Florida’s economy and the closeness of the education system’s fit with it.

Definitional Elements of “Skilled Workforce and Economic Development”

Defining Characteristic	Primary Implications	Progress Indications
Effective Matching of K-20 Curricula and Graduate Proficiency with [Skill] Requirements ...	<ul style="list-style-type: none"> ■ Virtually all H.S. graduates will be technologically literate ■ Virtually all H.S. graduates will meet minimum proficiency standards in mathematics and science ■ Both secondary and post-secondary programs will emphasize the completion of certification and degree requirements, not just the completion of courses 	<ul style="list-style-type: none"> ■ The proportion of employers reporting satisfaction with K-20 system graduates’ preparation for employment will increase ■ Average FCAT math and science scores at the secondary level will increase ■ The number of post-secondary degrees and certificates conferred on H.S. graduates within seven years of their graduations will increase
... From Industries Critical to Florida’s Future Economic Prosperity	<ul style="list-style-type: none"> ■ Post-secondary educational programs will emphasize the development and practical application of knowledge and technical skills required in high-demand occupations (e.g., computing, engineering, nursing, teaching, etc.) 	<ul style="list-style-type: none"> ■ The number of Florida’s post-secondary graduates placed in high-demand occupations in Florida will increase

The characteristics of “Quality, Efficient Services” should emphasize the guiding principles established for the K-20 Education System and the Board’s core values.

Definitional Elements of “Quality, Efficient Services”

Defining Characteristic	Primary Implications	Progress Indications
Effective Management of Resources	<ul style="list-style-type: none"> ■ Management processes and systems will be standardized and integrated across K-20 levels and institutions ■ With Florida DOE assistance, K-12 schools will maximize federal financial contributions for eligible school-based services ■ With Florida DOE assistance, universities will significantly increase federal and private investment in SUS institution-based R&D 	<ul style="list-style-type: none"> ■ K-20 administrative costs per student/customer will decrease ■ The proportion of K-12 school revenues from non-state/local government sources will grow ■ Private funding of SUS institutions and programs will increase ■ The number of partnerships between private organizations and SUS institutions will grow
Consistently High Responsiveness to Customers	<ul style="list-style-type: none"> ■ K-20 program information and assistance in using it will be easily obtained ■ Florida DOE will become the authoritative provider of such information and assistance 	<ul style="list-style-type: none"> ■ An online, “one stop” K-20 customer information system will be deployed ■ The numbers of the system’s online users and transactions will grow rapidly
Accountability for Results	<ul style="list-style-type: none"> ■ A post-secondary education accountability program analogous to the A+ Program for K-12 education will be developed ■ Easily understood measurements of student and school/institution performance will be regularly disseminated ■ Florida DOE will evaluate school/institution performance results to identify “best practices” and technical assistance needs 	<ul style="list-style-type: none"> ■ A post-secondary accountability program will be implemented and results published yearly ■ The proportion of low-performing K-12 schools that show year-to-year improvement in their “A+ Program” scores will increase ■ The proportion of post-secondary institutions that show annual improvement in their accountability program scores will increase

Information Sources and Bases for Analysis

Slide	Chart Title	Source	Methodology
23	Projected K-12 Instructor Vacancies Compared to Qualified Applicants	<ul style="list-style-type: none"> ■ Florida Office of Economic and Demographic Research, <i>Teacher Demand and Supply Forecasts, 2000</i>: Exhibit 103. http://www.myflorida.com/edr/Reports/Special_Reports/teachersupply.pdf ■ Accenture Analysis 	<p>Minimum vacancy given by source. Maximum vacancy calculated by:</p> <ul style="list-style-type: none"> ■ Fixing the ratio between the graduates from Florida education programs (A) and graduates in non-education disciplines from post-secondary schools within Florida (B) to recalculate the value of B. ■ Adding the new sum (C) of Florida Education graduates and non-education graduates from Florida (A plus B) to a recalculated value of graduates from other states who would teach in Florida (D). Graduates from other states (D) were similarly recalculated by fixing the ratio between out of state graduates and Florida Education Graduates. ■ Subtracting this sum of the Florida Graduates and out of state graduates from the given number of vacancies give the gap between supply and demand.
23	Projected Gap Between K-12 Instructor Demand and Supply	<ul style="list-style-type: none"> ■ Florida Office of Economic and Demographic Research, <i>Teacher Demand and Supply Forecasts, 2000</i>: Exhibit 103. http://www.myflorida.com/edr/Reports/Special_Reports/teachersupply.pdf ■ Accenture Analysis 	N/A

Information Sources and Bases for Analysis

Slide	Chart Title	Source	Methodology
24	K-12 Instructors Who Left Teaching	Florida Department of Education, Office of Strategy Planning	N/A
24	Why They Left	Florida Office of Economic and Demographic Research, <i>Teacher Survey</i> , April 18, 2000 http://www.myflorida.com/edr/Conferences/Education/survey.htm	N/A
24	What They Say Would Encourage Them to Return	Florida Office of Economic and Demographic Research, <i>Teacher Survey</i> , April 18, 2000 http://www.myflorida.com/edr/Conferences/Education/survey.htm	N/A
25	Current K-12 Instructors “Not Certified in the Field” in Which They Teach	Florida Office of Strategy Planning, <i>Critical Teacher Shortage Areas</i> , November 2001 http://www.myfloridaeducation.com/bin00047/crit1200.pdf	N/A
25	Students Scoring Below an Acceptable Level in Reading	Florida Dept of Education, Florida Comprehensive Assessment Test, 2001	FCAT scores are grouped into 5 “achievement levels.” Charts report percentage of students in each demographic groups whose scores placed them in either level 1 or 2

Information Sources and Bases for Analysis

Slide	Chart Title	Source	Methodology
26	Students Scoring Below an Acceptable Level in Math	Florida Dept of Education, Florida Comprehensive Assessment Test, 2001	FCAT scores are grouped into 5 “achievement levels.” Charts report percentage of students in each demographic groups whose scores placed them in either level 1 or 2
26	High School Drop-Out Rate	Florida Dept.of Education, Education Information & Accountability Services, Florida Information Notes, <i>Dropout Demographics in Florida's Public Schools and Dropout Rates</i> , September 2000. http://www.firn.edu/doe/eias/eiaspubs/fin01_05.htm	N/A
26	First-Year Community College Students Testing Not “College Ready”	Florida Department of Education, <i>Readiness for College: Performance of 1998-99 Florida Public High School Graduates on Entry-Level College Placement Tests in the 1999-2000 Academic Year</i> , January 2001 http://www.firn.edu/doe/postsecondary/college.pdf	N/A
27	K-12 Students Retained Statewide, 1999 – 2000	Southern Region Education Board, <i>Finding Alternatives to Failure: Can States End Social Promotion and Reduce Retention Rates?</i> January 2001 http://www.sreb.org/programs/srr/pubs/alternatives/AlternativesToFailure.pdf	

Information Sources and Bases for Analysis

Slide	Chart Title	Source	Methodology
27	First-Year Community College Students Not Testing "Ready," 2000	Florida Department of Education, <i>Readiness for College: Performance of 1998-99 Florida Public High School Graduates on Entry-Level College Placement Tests in the 1999-2000 Academic Year</i> . January 2001 http://www.myfloridaeducation.com/postsecondary/college.pdf	N/A
28	Likelihood That a Florida Student Will Go on to Earn a Four-Year Post-Secondary Degree	Education Governance Reorganization Transition Task Force Briefing Materials, 2001	N/A
29	National School Construction and Renovation Trends	<ul style="list-style-type: none"> ■ National Center for Education Statistics, <i>Condition of America's Public School Facilities: 1999</i>, June 2000 ■ United States General Accounting Office, <i>School Facilities: America's Schools Report Differing Conditions</i>, June 1996 	N/A

Information Sources and Bases for Analysis

Slide	Chart Title	Source	Methodology
32	Academic Readiness of Florida Public High School Graduates Beginning Post-secondary Education in 1997-1998	Florida Community College System, Office of Educational Effectiveness and Research. <i>Prior Year High School Graduates In the Florida Community College System</i> http://www.dcc.firn.edu/dccrepts/oer/dt16.htm	<ul style="list-style-type: none"> ■ Pie chart illustrates proportion of all community college students who tested “not ready” on one or more college placement tests ■ Right-hand bar chart illustrates the proportion of students in the “not ready” group who had completed the 19 college preparatory classes required for entrance in the SUS ■ Left-hand bar chart illustrates the proportion of students in the “ready” group who had completed the 19 college preparatory classes required for entrance in the SUS
33	Salient Impediments to Articulation at Each Educational Level	Florida Dept. of Education, <i>K-20 Articulation: Policies, Procedures, and Challenges</i> (unpublished), January 2002	N/A
34	Florida Virtual High School Enrollment	Florida Virtual High School (FLVS), Enrollment Participation http://www.flvs.net/learn_more/data.htm	N/A

Information Sources and Bases for Analysis

Slide	Chart Title	Source	Methodology
34	SUS Students Pursuing Their Studies Only Through Distance Education	Florida Division of Colleges and Universities, <i>An Overview of Distance and Technology Mediated Instruction in the State University System of Florida</i> , January 2001	N/A
37	US Job Growth by Education and Training Requirements 1994-2005E	Employment Outlook 1994-2005	N/A
38	Projected Job Growth in Florida's Fastest Growing Industries, 2001-2008	Florida Agency for Workforce Innovation, <i>Florida Industry and Occupational Projections to 2008</i> , 2001 Edition	N/A
38	Projected Salary Growth in Florida in Representative Occupations, 2001-2008	Florida Agency for Workforce Innovation, <i>Florida Industry and Occupational Projections to 2008</i> , 2001 Edition	N/A

Information Sources and Bases for Analysis

Slide	Chart Title	Source	Methodology
39	Students Testing “Proficient” in 1996 on National Assessment of Educational Progress Tests	National Center for Education Statistics http://www.nces.ed.gov/nationsreportcard/states/	N/A
40	Level of K-12 Instructors’ Use of Information Technology in the Classroom	Florida Department of Education, 2001. <i>2001 Technology Resources Survey</i> (unpublished and as yet unverified data)	N/A
40	Amount of K-12 Instructors’ Technology-Related Professional Development	<ul style="list-style-type: none"> ■ Florida Department of Education, 2001. 2001 Technology Resources Survey (unpublished and as yet unverified data) ■ Data labels adapted from the <i>Milken Professional Competency Continuum’s</i> “Stages of Progress” 	<ul style="list-style-type: none"> ■ Data labels used are: “Advanced” = Transformation “Regular” = Adoption “Limited” = Entry ■ Percentages are an aggregate of percentages reported by 3,177 schools surveyed
41	Biggest Challenges Facing Florida Businesses	Florida Trend, 2001 Annual Top Rank Florida Book of Lists http://www.FloridaTrend.com	N/A

Information Sources and Bases for Analysis

Slide	Chart Title	Source	Methodology
41	Level of Difficulty Florida Companies Have In Finding Employees with the Right Skills	Florida Trend, 2001 Annual Top Rank Florida Book of Lists http://www.FloridaTrend.com	N/A
42	Employers Satisfied With Post-Secondary Preparation of Their Employees	Measuring Up 2000: The State-by-State Report Card for Higher Education http://measuringup2000.highereducation.org/getstates01.cfm	N/A
42	Post-Secondary Degrees Conferred Per 100,000 Residents	National Center for Education Statistics, <i>Integrated Post-Secondary Education Data System, Completions Survey, 2000</i>	Total Number of Post-Secondary Degrees conferred divided by Total State Population
42	Likelihood that a High School Freshman Will Graduate and Enroll in Post-Secondary Education	Measuring Up 2000: The State-by-State Report Card for Higher Education http://measuringup2000.highereducation.org/getstates01.cfm	N/A

Information Sources and Bases for Analysis

Slide	Chart Title	Source	Methodology
43	R&D as a Percentage of Annual Gross State Product	National Science Foundation Academic Research and Development Expenditures, 1998 http://www.nsf.gov/sbe/srs/seind00/append/c2/at02-21.xls	N/A
43	Annual Academic Research and Development Spending (\$Ms)	National Science Foundation Academic Research and Development Expenditures, 1999 http://www.nsf.gov/sbe/srs/nsf01329/pdf/b29.pdf	N/A
43	Percentage of All State Patents Earned by Post-Secondary Institutions	United States Dept. of Commerce, Patent and Trademark Office, 2000 http://www.uspto.gov/web/offices/ac/ido/oeip/taf/asgstc/regions.htm	N/A

Information Sources and Bases for Analysis

Slide	Chart Title	Source	Methodology
46	Issues Stemming From Lack of a K-20 Information Technology Plan	Florida Dept. of Education, <i>Supporting Analysis for the Secretary's Reorganization Plan</i> , December 2001	N/A
47	Current Situation for K-20 Education System Administrative Functions	Florida Dept. of Education, <i>Supporting Analysis for the Secretary's Reorganization Plan</i> , December 2001	N/A
48	Overview of K-20 Education System Customer Communications	Florida Dept. of Education, <i>Supporting Analysis for the Secretary's Reorganization Plan</i> , December 2001	N/A
49	Comparison of Current K-20 Education System Accountability Efforts	Accenture analysis	N/A