A Roadmap for Measuring and Increasing Relevant Outputs
For the State University System

What the Florida Governor and Legislature want from the state universities/system: in short, efficiency, productivity and responsiveness. Legislative leaders and the Governor consistently focus their interests in the following areas:

1) A worry that universities are wasteful and not efficient
2) A sense that universities offer obsolete, arcane majors and classes that are irrelevant to modern society and employment needs
3) Concerns about duplication of programs
4) A sense that students need to be notified of employment and salary opportunities post-graduation
5) Universities are not providing enough graduates in STEM areas
6) A perception that graduation rates are not high enough
7) Concerns about job placement and salary potential post-graduation

Objectives: Use basic, transparent, and easy to understand metrics to measure efficiency, productivity, and responsiveness 8-10 measures with just a few sub-measures. The Board of Governors should then set goals for improvement in these measures--system wide --as part of its Strategic Plan. Allow universities wide discretion in how to improve those metrics. Do not attempt to regulate or interfere with the universities’ processes (pay system, class size, degree offerings, etc) to meet these goals, but set expectations for these goals. Establish incentives to attract more students toward STEM degrees. Free existing funding to allow universities to improve the key metrics and increase STEM degree production.

Setting the Stage: It is clear that a case can be made for increased funding. Florida as a state gets a good return on what it spends, but the rate of return would be even greater for each new dollar spent. Totaled per student, 44 states spend more than Florida.

Since the 2005-06 fiscal year, the SUS has made impressive gains in STEM baccalaureate and graduate degrees awarded (18% and 31% increase, respectively), research and development (nearly doubled leading to a national rank of 4th) and 6-year graduate rate (4th among largest university systems) and retention rates (2nd). With tuition increases, operational budgets are still down, yet the most basic deliverables are up. In saying this, Florida’s numbers could and should be higher, due to our size and our needs. And under current economic conditions, there is little likelihood of new money. Thus to improve, adjustments in internal university spending will need to be made.
This fact has therefore prompted the discussion of capping liberal arts programs and redirecting money toward STEM production by some in Tallahassee. This discussion is more about increasing targeted degrees than disparaging non-targeted degrees.

Initial Considerations:
1. Difficulty in legislating or regulating efficiency; from a governance perspective this is an executive function.
2. “One size fits all” approach will be counter-productive as each university is particularly unique.
3. Deep Recession has forced Florida universities to cut less productive or less important degree offerings.
   - Over 100 Centers & Institutes closed or placed in inactive status
   - 218 degree programs terminated; 74 suspended
4. Local Boards of Trustees have provided tighter management.
5. Liberal Arts programs are “profit centers” which subsidize STEM offerings.
   a) Faculty for STEM are more expensive, classes are smaller, and classrooms (labs) are more expensive than for non-STEM
6. Many of the Fortune 500 CEO’s are liberal arts majors, as were President Barack Obama and Governor Mitt Romney.
7. Critical thinking skills are developed in the liberal arts: Florida needs to be Athens, not Sparta. In fact, the Governor makes the case for this in his recent letter to the SUS requesting data.
8. Duplication at the undergraduate level is not a real issue, as universities have little incentive to add a degree with no demand or high expense, and Boards of Trustees are watchful. Broad general education needs to be provided on each campus. Duplication may be more of an issue at the graduate level, but is the responsibility of the Board of Governors to watchdog.
9. A university and its reputation exist in a national and international marketplace, with unique historic, cultural, and governing principles that can be destroyed easily. It is easy to do critical damage to a university, or to a university system. This could lead to difficulty in hiring faculty.
10. Student Degree selection.
    • Students gravitate to majors that interest them, and where they perceive employment to be.
    • Students also operate in the marketplace in terms of selecting majors
    • Pre-Y-2K, there was a dramatic increase in computing majors as companies were extensively hiring IT grads.
    • When there is the cyclical shortage of teachers and nurses, students flock to these programs.
11. The critical importance of weaving technology/technology tools into every degree program; meet requirements of existing and new high-tech employers.
    • Liberal arts faculty can rethink their disciplines in terms of how they prepare graduates for entry into the high tech workplace of the 21st-century.

I. Metrics to Address Efficiency, Productivity & Responsiveness of the State Universities
Create simple metrics that reflect efficiency, productivity, and responsiveness and set multi-year goals:
• BOG as part of its Strategic Plan to allocate to the universities responsibility to reach the goals so the system reaches the goal; not every university has to move the needle on individual goals, but rather the collective.
• Allow each university the flexibility to manage to the goal (not every university will differentiate tuition the same way; will set the scholarship levels the same, etc.).

Metrics
1) Graduation Rates
   a) Expected Graduation Rate (EGR) -- Since most students work at least part time, the graduation rate needs to be adjusted to expectancy, and then to rise.
   b) Differentiating rates by FTIC’s, AA Transfers, Other Transfers
2) Degree Production: increase in number of graduates
   a) STEM degree production: increase in number of STEM graduates
3) Retention rates (freshman to sophomore; sophomore to junior)
4) Professional licensure passage rates
5) Economic Development Impact
   - Number of patents
   - Number of licenses
   - Royalty income
   - Business start-ups spun off of university created enterprises - number of jobs created
6) External research grants and contracts
7) Medical breakthroughs
8) Job placement outcomes – collect and submit uniform data
   a) Within X months
   b) In critical disciplines
   c) In-state
   d) Salaries

II. Strategies to Increase Employability & Starting Salaries of Baccalaureate Graduates
Better articulate the data we collect, what we measure and the information on which we can report concerning the success of our graduates in the world.

A. Providing Relevant Information to Students
   1. Expand the Academic Learning Compacts with students and the Academic Program guide to include additional characteristics of programs (class sizes, teaching evaluation summaries, grade distributions, and employment data where available).
   2. Searchable and fully linked BOG website as the data center for job market/starting salary data – FL, national, international; earning potential; future market growth/forecasts;

B. Reporting Information about Students/Graduates
   1. FETPIP; in-field; out-of-field; in-state; out-of-state

C. Continuous Improvement
   1. How we know what employers want from us
III. Strategies to Increase STEM and Other Critical-Need Graduates (use the market to encourage more students to major in STEM areas):

A. First, the Legislature & SUS must partner to define STEM degrees that are desired
   a) include medical/health-related professions—STEMM? Consider the magnitude of the state’s investment in graduate medical education and previous efforts to address critical nursing shortages, etc.

1) Allow universities to differentiate tuition among classes; in short—allow market rate tuition:
   a) Charge more for high demand majors
   b) Charge less for STEM majors
      i) Alternative: make STEM classes free

2) Create more scholarships for STEM majors

3) Use Bright Futures to encourage selection of STEM as a major
   a) Give higher Bright Futures funding to STEM majors;
      (i) Alternative: give only to STEM majors

4) Adjust FRAG and ABLE grants similarly; more or only to STEM

5) Create STEM Graduation Grants
   a) Give a $2500 or $5000 award upon graduation to STEM graduates or to STEM with certain GPA

6) Forgive student loans for STEM graduates who work in field for certain number of years
   a) After the Sputnik launch, Congress passed the National Defense Education Act. The act was designed to provide the country with more schoolteachers, and with specific defense oriented personnel, scientists, foreign language scholars, and engineering students. The loans were forgiven if the graduate worked in field for a certain number of years.
      b) Would require significant new funding

7) “Compete and Complete” – For a targeted industry (i.e., computing) where there is a concern that our low numbers of graduates will not support the continued presence of high-tech employers in Florida. Create academic pathways that will allow juniors & seniors to be hired, trained and paid by the high tech industry employer, and continue to work on their degree (without breaking “continuous enrollment”) using strategies such as distance learning, on-site instruction, or other innovative methods of instruction.

8) Create/strengthen mentoring and advising programs for high-need degree programs.

9) Alter approaches and strategies to attract out-of-state graduate students (e.g., classify out-of-state students in specific high-need STEM programs as Florida residents for tuition purposes; allow those service members with an Honorable Discharge (DD-214) to be classified as a Florida resident, if they agree to pursue specifically defined STEM degrees (See HB 131 & SB 164).

Note: There are considerable consequences in raising tuition and/or decreasing Bright Futures funding for non-targeted degrees. These are presented as options for universities to consider in consultation with its faculty, and not necessarily as recommendations.
IV. Funding sources:
Premise: currently universities are highly regulated in terms of spending; goal is to liberate their internal finances to allow each to fund the options presented above as tools to bring about results.
Options:
1) Eliminate the requirement that 30% of Differential Tuition must go to need based aid to fund need based aid; major universities have sufficient need based aid
2) Permit universities to allow tuition to float to market rates—up or down. Allow tuition differentiation to be revenue positive.
3) Make Bright Futures changes that are revenue positive, allowing universities to create more STEM scholarships
4) Eliminate current restrictions on university funding streams to allow each university to spend money with objective of reaching expected outcomes defined below
5) Eliminate legislative restrictions (spending authority caps) on the Student Fee Trust Fund (ability to spend all that is collected without prior approval of the Legislative Budget Commission)

V. Excellent Teaching
This presentation on various options to help make the State University System of Florida even stronger would be incomplete if it did not include a strong recommendation that institutions be given the resources and flexibilities to:
- Reward effective teaching as an incentive for continuous improvement; and
- Create a rewards system that reflects and encourages excellence in research and teaching.

VI. Recommended Next Step: Commission on Outcome-Based Funding