

Nine Flawed Assumptions of Higher Education Reform

Statement of the Senate Ad Hoc Committee, Florida Gulf Coast University

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An FGCU Faculty Senate Ad Hoc committee met to draft an initial response, from the faculty perspective, to some of the issues raised by current calls for a radical reform of higher education in Florida.

We agreed that a detailed, point-by-point response to any particular proposal would be premature. Since there are a wide variety of models and solutions under consideration, selecting any one specific problematic proposal and addressing it might serve to elevate its legitimacy as a serious proposal when it may still be no more than an ill-formed thought experiment.

Instead, we focused our efforts on understanding and addressing some of the underlying assumptions embedded in two recently circulated documents that are of most immediate concern to FGCU, namely the [letter sent by Governor Rick Scott to President Bradshaw](#) and Governor Rick Perry of Texas's much-discussed [Seven Breakthrough Solutions for Higher Education](#), which seems to have influenced Governor Scott's understanding of the issues at stake.

Our analysis of these documents identified **nine flawed assumptions** about the condition of state-supported higher education. In highlighting these nine assumptions, we also seek to draw attention to the significant strengths of the traditional American model of higher education. We want to refocus the debate in a way that clearly distinguishes between ideologically-framed rhetoric and a fact-based, data-driven assessment of the issues at stake.

1. The foundational premise of the proposed reform is that the current system of higher education in his country is “broken” and needs radical structural revision.
2. Better economic and educational outcomes will be obtained if the government determines which subjects are “useful,” eliminates those that are “not relevant,” and sets goals for how many students should be graduated in each major field.¹
3. The economic problems of the present are mostly due to a discrepancy between the skills of new college graduates and the needs of employers. The first priority of

¹ This can be seen most strikingly in Governor Scott's announcement in an October 10th interview that his top priority in reforming Florida's college and university system would be in “shifting funding to degrees that have the best job prospects” and on prioritizing support for STEM disciplines over subjects like anthropology and psychology. It is also implicit in question H in Governor Scott's Oct 13th letter to President Bradshaw: “Do you have measurable goals for the number of graduates with degrees in specific fields such as science, technology, engineering, nursing etc?” This is also the central underpinning of Senate Bill 1366 introduced by Senator Gaetz.

education should be responding to employers' demands for technical and vocational training in specific skill areas.²

4. Educational institutions should not waste scarce resources teaching irrelevant humanities, arts and social-science subjects. Instead, they should focus on producing graduates in Science, Technology, Engineering, and Math (STEM) fields and in practical vocational and business-related majors.³
5. Perceived deficiencies in the educational outcomes of college graduates are significantly influenced by deficiencies in the quality of teachers, and / or in teaching methodologies. Education should be compared to industry, and its outcomes can be measured in terms of "efficiency."⁴
6. Teaching and research are distinct activities and their funding should be split.⁵
7. Teacher performance is pervasively lagging because teachers are not given monetary incentives to improve. Competitive incentives such as merit pay will encourage better teaching.⁶
8. Students should be viewed as "consumers" of education; student evaluations are a reliable method of assessing "consumer satisfaction;" "consumer satisfaction" in education is a valid measurement of educational outcomes.⁷
9. There is insufficient assessment of teachers, programs and institutions in higher education. Costs and liabilities associated with increased assessment are justified by the results in terms of improved outcomes.⁸

² Governor Scott argues in his Oct 13th letter to President Bradshaw, for example, that "the biggest challenge Floridians face is finding a job" and he specifically asks whether FGCU has "measurable goals to meet employers' current needs." This is also clear in SB 1366's focus on measuring the success of degree programs by the salary earned by their graduates.

³ Again, this was clearly seen in Governor Scott's October 10th declaration that his top priority would be shifting funding to degrees that he perceived to have the best job prospects and his insistence that the "Florida doesn't need a lot more anthropologists in the state."

⁴ This can be seen in Texas Solutions 1, 2 and 4, all of which emphasize the need to improve teaching effectiveness and efficiency.

⁵ Texas Solution # 3, for example, is "split research and teaching budgets to encourage excellence in both."

⁶ Texas solution #2 for example emphasizes the need to "create a financial incentive to improve the effectiveness and efficiency of teaching."

⁷ The idea of students as consumers most clearly underpins Texas Solution # 5 which asks for the creation of learning contracts between Deans, department heads, and teachers that "clearly state the promises of the Degree program to each student." SAI scores are noted as the key determinant of success in teaching in Texas Solutions 1, 2 and 4.

⁸ Governor Scott's letter to President Bradshaw, for example, asks whether FGCU has "measurable goals for each graduate in the areas of writing proficiency and critical thinking" and whether we "conduct 360-degree reviews with the Board of Trustees", demonstrating a lack of familiarity with the huge amount of data that is collected in institutional and program level review and the multiple ways in which this is disseminated, discussed and acted upon. Similarly, the reporting provisions in SB 1366 would require a huge amount of additional expensive administrative work, requiring significant additional expense, yet would contribute nothing to the actual process of teaching and learning.

Our analysis starts with some basic principles. Education policy decisions, like medical decisions, should “first do no harm.” Before any radical changes are imposed, it is critically important to understand the problem(s) they purport to address. Reforms should not be based on unfounded assumptions, but on a thorough understanding of the facts as revealed by research and analysis.

The late Cornell economist George Staller said that the transition from a free-market environment to a state controlled economy was “like turning an aquarium into fish soup,” a relatively easy process because all the ingredients are in place. It is far more difficult, according to his experience in assisting Eastern European economies after the collapse of the Soviet Union, to turn fish soup back into a thriving aquarium.

We believe that the same principle applies to higher education. Currently, we have a free-market system shaped by student and industry needs and choices, and by the informed professional judgments of faculty and administrators. Yet, some political actors who are normally free-market advocates in all other industries are proposing to replace this with a government controlled system in which policy is set by politicians and implemented by governmental bureaucrats.

Taxpayers have the right to know their money is not being wasted on duplicative and unnecessary “reform” policies that yield little new information and no improvements. Any short- or long-range reforms should therefore take into account the international reputation and success of the American model of higher education, as well as the considerable body of existing research on what conditions promote the best educational outcomes.

Since the choices we make have the potential to cause significant long-term damage, policy decisions for education should be **evidence-based** and **historically informed**. As we have learned over the last thirty years, well-intentioned but ill-informed policy decisions that attempt to achieve educational reform through government intervention can have unexpectedly adverse consequences. We need to study the causes of these consequences, so as not to repeat the mistakes of the past.

In the following pages we undertake a more detailed, but still preliminary, critical analysis of the assumptions behind the plan to reform Florida higher education. We encourage all faculty, administrators and members of the public who care about our children’s educational future to read this analysis in conjunction with Governor Scott’s letter and Governor Perry’s proposals.

Assumption #1: The current system of higher education in the US is “broken” and needs radical structural revision.

This foundational premise of the proposed reform should be measured against the collective wisdom of the global marketplace for higher education. A nation’s

competitive advantage in any industry is demonstrated by the power that industry commands in the international marketplace.

The U.S. model of higher education is arguably the most competitive in the world, demonstrated both by our balance of trade and by the degree to which other systems are seeking to emulate ours. Our balance of trade in education, as described in [an October 2011 report](#) from the U.S. Department of Commerce Bureau of Labor Statistics, is strongly positive and has continued to grow over the past three years, even as other U.S. goods and services have faced severe challenges. From 2008 to 2010, our nation's "exports" of education increased from \$18b to \$21.3b. China and India, some of our fiercest competitors in global marketplaces, are the two largest consumers of our higher education system. Our trade surplus in education has grown from \$12.8b to \$15.6b during this time.

The U.S. is currently a major leader in educational research, a major exporter of higher education expertise, and the leading destination for foreign nationals seeking a top-quality education (For detailed data, see: [Institute of International Education, Open Doors](#) report 2010.)

Since the Bologna Declaration of 1999, European Community nations have worked to harmonize their divergent University systems, with many of the key elements of [the European plan](#) being adopted from the U.S. model.

It is not surprising that public dissatisfaction with the ever-increasing costs of higher education has risen in conjunction with nationwide defunding of public schools and the transfer of expenses from the state government to the student. However, we need to distinguish between funding issues, which affect things like class size, curriculum offerings, staffing and infrastructure resources, and the basic model of higher education itself.

American higher education certainly faces challenges. Any system this large and this complex must be continuously improved, or its capabilities will decay. But it is questionable whether the higher education model itself is "broken" to the degree that radical structural changes need to be deployed in order to "fix" it.

Assumption #2: Better economic and educational outcomes will be obtained if the government determines which subjects are "useful," eliminates those that are "not relevant," and sets goals for how many students should be graduated in each major field based on employers' needs.

The new wave of reform embodies a centrally-controlled, top-down management structure similar to that implemented in the old Soviet Union or in China. Under a centralized system, the government decides which subjects should be taught, based on measures of "utility" and "relevance" established by central planners. Some European countries also limit access to higher education based on anticipated demand for certain skills.

In contrast, traditional higher education in the U.S. is based on a free-market model, where educator interests and student demand combine to offer a broad and constantly changing array of courses, and students are free to pick their areas of study.

Before we abandon this model, we should look carefully into how successful the centralized, top-down models have been at promoting economic health, educational outcomes, and high rates of employment.

We would argue that the Soviet- and Mao-style approach did not work if the goal was to foster innovation and economic growth. In France, where students are trained for very specific jobs based on anticipated industry needs, the top-down system has resulted in massive unemployment of young people trained for narrowly specific jobs that turned out not to exist.

In fact, no central planner knows what is really necessary or can predict what will be most useful over the longer term. The only college course Steve Jobs remembered as being particularly influential on his development as a designer of innovative electronics was a calligraphy course at Reed College. You never know what will be a formative experience.

Assumption #3: The economic problems of the present are mostly due to a mismatch between the skills of new college graduates and the kinds of jobs available to them. We need to focus our resources on filling the immediate needs of employers for technical and vocational training.

Historically, a liberal arts education⁹ has been considered the most valuable foundation for an educated citizenry, and for good reason.

A vocational program teaches students how to do a particular job or type of work. It is narrow and focused on mastering a specific skill set or body of knowledge.

A liberal arts education prepares students to recognize, analyze and solve unfamiliar problems, independently seek out information, judge its quality, and use it to solve complex and unfamiliar problems. The liberal arts teaches students how to formulate new questions and integrate information and skills across multiple disciplines and fields.

We believe that the liberal arts model has lost none of its value, and is indeed even more necessary as the pace of change accelerates.

⁹ **Liberal arts:** the branches of knowledge that were considered, in classical Antiquity, to be necessary for broadly educated free men, as opposed to theology and to specialized vocational subjects. The Liberal Arts includes the humanities as well as the social and natural sciences. (Note that the term “liberal” in “liberal arts” has nothing to do with liberalism in the political sense.)

Students trained in a narrow vocational path are at the mercy of a constantly evolving workplace. If the market for a specific skill set dries up, they cannot adapt and must seek new training in a different set of skills. A true liberal arts degree does not prepare students for any particular job; it gives them the ability to master new skills and knowledge rapidly and intelligently, and apply what they have learned to new situations.

This is why many large companies recruit graduates directly from the top liberal arts colleges and universities, and why the top professional schools look for applicants with broad and deep liberal arts backgrounds. A bright person who is able to think critically, master new information rapidly and communicate effectively can easily be trained to do a specific job. However, people who are trained for a particular job but lack a good general education will not be critical thinkers, good communicators, out-of-the-box problem solvers or creative innovators, and will not be able to adapt to changes and innovation in tomorrow's workplace.

Decades of experience have shown that a good liberal arts education is the best preparation for advanced studies in sciences and technical subjects, education, administration, law, public service, business and the arts. The more broad an education a person brings to the challenges of life, the better they will be prepared to meet those challenges.

We must not forget that the object of higher education is not simply the individual reward associated with enhanced career success, but the public good created by an informed and engaged citizenry and which is essential to the effective operating of a democratic system.

Assumption #4: Educational institutions should not spend scarce resources teaching irrelevant humanities, arts and social-science subjects. Instead, they should focus on producing graduates in STEM fields and in practical vocational and business-related majors.

The original goal of higher education in the United States, as framed by Thomas Jefferson among others, was to create responsible, informed citizens capable of watching over and perpetuating liberty.¹⁰ This fundamental justification for higher education has never been seriously challenged and remains in force to this day. In addition, the founding fathers envisioned education as a means of teaching those

On August 13, 1786, Jefferson wrote to his legal advisor, George Wythe, "I think by far the most important bill in our whole code is that for the diffusion of knowledge among the people. No other sure foundation can be devised, for the preservation of freedom and happiness...Preach, my dear Sir, a crusade against ignorance; establish & improve the law for educating the common people. Let our countrymen know that the people alone can protect us against these evils [tyranny, oppression, etc.] and that the tax which will be paid for this purpose is not more than the thousandth part of what will be paid to kings, priests and nobles who will rise up among us if we leave the people in ignorance."

citizens the knowledge and skills needed to make a living, participate in the economy and advance the common good.

The four most important foundations a student needs in order to become a broadly and deeply educated person as well as an informed participant in our democratic system are: (1) critical thinking and analysis skills, (2) independent research and study skills, (3) communications skills, especially reading and writing, and (4) broad cultural and historical knowledge, which is needed to contextualize information.

These foundations are most successfully acquired when a student is fully engaged and intellectually excited by subject matter, regardless of what the subject matter is. Independent research, analysis, problem-solving, communication and general background knowledge can be learned in every type of course, as long as the student is engaged and motivated.

Recent studies have shown that more learning occurs in the humanities and social sciences disciplines whose utility is being questioned than in any other field of study. The recently published book *Academically Adrift: Limited Learning on College Campuses* (University of Chicago Press, 2011), which has been used to argue that there is a crisis in student learning in college, conclusively demonstrated the relationship between teaching strategies associated with humanities and social science fields and successful student learning outcomes.

Students who took classes with more than forty pages of reading per week and more than twenty pages of writing per semester gained the most knowledge over the course of a four year degree, with the result that students majoring in liberal arts fields saw "significantly higher gains in critical thinking, complex reasoning, and writing skills over time than students in other fields of study." Students majoring in more vocational fields such as business, education, social work and communications showed the smallest gains, raising further question of the assumption that vocational training is a more useful means of job preparation than the liberal arts. The evidence for intensive reading and writing as the most effective means of ensuring student learning also challenges the assumption that the most efficient way of teaching students is in large group lecture sections, where intensive reading and writing assignments are difficult to apply.

A recent study by the Social Science Research Council underlined the value of a liberal arts education in developing critical thinking skills. It found that students who mastered the ability to think critically, reason analytically and write – skills that the study noticed to be associated with a liberal arts education – were three times less likely to be unemployed than those who hadn't (3.1% vs. 9.6%); half as likely to be living with their parents (18% vs. 35%); and far less likely to have amassed credit card debt (37% vs. 51%).

The evidence shows, then, that humanities and social-science subjects like art, anthropology, history and philosophy are no less powerful education tools than the STEM subjects. For many students, they will be much more powerful. We do not

know what will ignite a student's motivation and curiosity; students have to find their own way into that receptive state. Without engagement, they will not be motivated to persist long enough to acquire the foundation of skills they need to succeed. Being able to take a range of courses and learn in different modalities and disciplines is critical to student success.

It is also wrong to assume that students are not majoring in STEM subjects because universities are not encouraging them to do so. Given that Florida student ACT College Readiness Benchmark Scores exam results show that only 42% reach the acceptable college benchmark standard scores in mathematics, and a mere 28% in science, it is not surprising that enrollment and successful completion of STEM degree programs is low. In fact, many students do enter college planning to major in STEM subjects, but change their minds once they discover that they lack the requisite skills and study habits needed to succeed in those courses. The number of STEM majors graduating depends much more on student motivation and how well prepared they are for college level work than on any decisions the college makes.

Assumption #5: Perceived deficiencies in the educational outcomes of college graduates are significantly influenced by deficiencies in the quality of teachers and / or in teaching methodologies. Education should be compared to industry, and its outcomes can be measured in terms of "efficiency."

It is a popular belief that many college teachers are ineffective and inefficient, and that most of their time is largely spent on activities that do not directly impact student learning. We do not know of any evidence to support these assumptions. We do know, however, that 50% of Florida students enter Community College and four-year Universities requiring remediation, and only 20-24% of graduating high school students meet all ACT College Readiness Benchmarks in English, Reading, Mathematics, and Science.

The competition to become an employed college teacher is intense and never-ending. For many years now there have been far more highly-qualified new PhDs emerging from top graduate programs than there are entry-level jobs teaching in colleges. Institutions can use their hiring opportunities to select from an enormous pool of talent, and excellent teaching skills are one of the main criteria used in selecting job candidates. In tenure-granting institutions, teaching is increasingly a key factor in achieving tenure, while systems of post-tenure review have been put into place to ensure continued excellence. As a result, the quality of teaching faculty has never been higher than in the last fifteen years.

Currently, teaching quality is assessed by a number of different measures, most of which are evaluated on a yearly basis. These include supervisor and peer evaluations, tracking incoming and outgoing student performance, measures of student achievement of learning outcomes and goals, as well as student evaluations of performance. All of

these are in place to capitalize on teaching strengths and identify and improve on weaknesses.

Judging educational outcomes by measures of “efficiency” is problematic. It is true that if a class size is doubled, its teacher is more “efficient” in terms of students taught. What is not measured, however, is the quality of that education. No convincing evidence, however, has changed the longstanding and widespread conviction amongst experienced educators that smaller classes produce more satisfactory educational outcomes than very large classes. The pressure to scale up college classes in order to meet efficiency goals is understandable, but we should not confuse acceptable compromises with true best practices.

Assumption #6: Research and teaching are opposed and mutually exclusive enterprises. Splitting the research and teaching budgets will result in better outcomes for students and more cost-efficiency.

Again, experience has demonstrated the value of integrating teaching and research. Research informs and energizes teaching; teaching similarly inspires research. Most academics engaged in both activities will testify that they are better researchers because they teach, and better teachers and mentors because they do research. Undergraduate and even high school curricula are enriched when students participate in professional level research activities with their teachers, and are encouraged to develop questions of their own. Undergraduate research has been proven to advance student learning significantly.

“Research” should also be defined accurately: it is not only what goes on in laboratories and is funded by government or industry grants, but anything that pushes forward the boundaries of human knowledge. The vast majority of University faculty engage in research, both theoretical and applied, in order to advance knowledge within and across their academic fields. Much of this research is conducted without any additional cost to the university as a part of faculty member’s integrated roles as teachers, scholars and public servants.

Assumption #7: Teacher performance is pervasively lagging because teachers are not given monetary incentives to improve. Competitive incentives such as merit pay will encourage better teaching.

There is no evidence to support any of these assumptions. Good teachers teach well because teaching well is easier and more rewarding than teaching badly. The reasons for poor teaching are varied, but lack of monetary incentive is not one of them. Providing competitive incentives will therefore not improve the poor teachers or motivate the good ones. Instead, resources should be spent on understanding the sources of any problems in achieving course goals and student outcomes, and on providing support that will help improve areas of weakness.

Additionally, monetary incentives encourage focusing on the monetary rewards rather than on the intrinsic rewards of teaching. Teachers concentrate on the quality of their classes and are motivated by satisfaction in seeing student improvement and mastery of course material. They should not be encouraged to manipulate their courses and teaching methodology, which take away focus from teaching and put that focus on financial incentives.

We are in favor of rewarding excellent teaching, but are concerned about how “excellence” is measured. It is very dangerous to base teacher compensation on flawed or narrow methods of assessment that will give an incentive to “game the system”. Faculty wholeheartedly support merit pay, and should be rewarded for excellence, but excellence needs to be determined based on thoughtful assessment mechanisms and on a wider range of metrics than simply SAI scores.

Assumption # 8: Students should be viewed as “consumers” of education; student evaluations are a reliable method of assessing “consumer satisfaction;” “consumer satisfaction” in education is a valid measurement of educational outcomes.

Student evaluations are a useful tool and a well-designed instrument often yields valid information when rightly interpreted in context. However, it is questionable whether students, particularly underclassmen, taking courses are the best judge of what is necessary or good for them in the long run.

As most students are at the beginning of adulthood, they are lacking the knowledge and experience needed in order to make meaningful assessment of their teachers and classes. They may not understand the reason for certain teaching methods and approaches. The in-class experience with a particular teacher may feel positive at the time, but the curriculum may not be well-designed. A student may not be prepared for college work, and attribute the problem to the teacher instead of to his or her own work habits and expectations. Students will not know what they are missing until years later, when they discover the gaps in their educations. Moreover, students are not the only consumers of higher education but the companies, non-profits, and other institutions who hire our students, as well as the country as a whole which depends upon an educated citizenry for its democratic political system.

Student evaluations tend to give relatively higher scores to charismatic teachers who teach “fun” subjects, and lower scores to teachers of difficult subjects who grade rigorously. Research shows that student evaluations of lower-level or core courses are in general lower than those for upper-level courses or those in their major, irrespective of the quality of the teachers. If teacher pay depends on high student evaluation scores, teachers will have an incentive to make their courses less demanding and inflate grades. Students may be happier, but they will learn less.

Heavy reliance on SAI scores as a measure of teaching effectiveness is also complicated by empirical studies which demonstrate that students often exhibit racist, sexist, homophobic,

and ageist comments on evaluations of their professors/instructors, and that the scores they award are often impacted by such biases.

Finally, and perhaps most importantly, characterizing a college degree as a “product” that is “purchased” by customers gives students a false understanding of the meaning of higher education. When you “buy” something, you are entitled to expect it to perform as advertised. If you buy a degree expecting a guaranteed job, and do not get the job, you will consider yourself cheated. But only in planned and controlled economies do degrees come with that kind of guarantee.

In the American educational system, the degree and the entire learning experience it encompasses are not commodities to be bought. The consumerist model implies that the student is entitled to the grade or a degree, not because they have earned it by their hard work and sustained effort, but because they have paid tuition. It is a small step from this false model of education to the act of buying a plagiarized term paper or a degree from a degree mill.

The only guarantee that an ethical educational institution can and should offer is the guarantee that students will be given a quality educational experience, one that meets national professional standards for educational quality. Our efforts as citizens, politicians and educators should be directed at ensuring that every student’s education is subjected to appropriate quality standards.

Assumption #9: There is insufficient assessment of teachers, programs and institutions in higher education. Costs and liabilities associated with increased assessment are justified by the results in terms of improved outcomes.

All state universities already undergo multiple program and institution-level assessments as part of their accreditation procedures. FGCU, for example, maintains accreditation with the Southern Association of Colleges and Universities (SACS) as well as a variety of professional accrediting agencies for particular degree programs in fields such as Engineering, Business, Counseling, Social Work and Nursing. The State of Florida already requires SUS universities to meet accountability measures such as Annual Program Assessments and Seven-Year Program Reviews, and to create Academic Learning Compacts for each undergraduate and graduate degree program, in addition to individual faculty professional development plans and annual reports. Assessment is time-consuming and expensive, and care should be taken to ensure it does not swallow up resources that would otherwise be spent educating students, and contribute to the further expansion of administrative layers. New accountability measures should not be duplicative, and deregulation and cost/benefit analyses should be considered here as well as in other areas of operation.

In conclusion, we strongly support efforts to improve the Florida State University system in order to provide the highest quality learning experience we can for our students to take into the world, whether in efficiency, assessment, or quality of education in the college system in Florida. As educators and staff of

FGCU, we want the best for our students and the state where we live. We are fully invested in education, not just in our vocation, but in our beliefs that we are doing an important job that betters and strengthens our society. However, reform and improvement in education must be carefully thought out, considered, and planned before taking untested, expensive, and perhaps harmful steps towards change.