

SIX-YEAR PLAN: ADDRESSING TOP JOBS 21
THE UNIVERSITY OF VIRGINIA



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“Every student in Virginia deserves the opportunity to get a high-quality education at an affordable price. Virginia’s higher education institutions are among the best in the nation. However, we must increase access and ensure that we are adequately preparing our students for the jobs of tomorrow when they graduate. The ‘Top Jobs’ legislation will enable our institutions to meet the goal of issuing an additional 100,000 degrees over the next 15 years, making Virginia one of the most highly educated states in the nation. In fact, based on this legislation, for example, the University of Virginia Board of Visitors already is poised to add nearly 1,000 new spaces for in-state students on the University’s grounds, and that’s great news. Our legislation also places a greater emphasis on the high demand science, technology, engineering and math subjects through the formation of a public-private partnership that will engage the business and professional community in leveraging best practices for K-12 and higher education. The legislation will create the framework for sustained reform-based investment and will encourage meaningful innovation through the use of greater technology, year round facilities usage and innovative and economical degree paths. By implementing these reforms, more Virginia students will have access to Virginia institutions. These reforms will help us attract new employers to Virginia, and better prepare our citizens to fill the jobs that already exist in the state today. We must do better in providing an affordable quality education in Virginia, and we must look to better capitalize on the resources already available at our great institutions. This legislation is based on a clear understanding of what it takes to not only succeed, but to lead, in the 21st century economy – and, first and foremost, it takes a highly educated workforce. We have a good idea what this investment will produce for our state, because the Cooper Center’s comprehensive recent study, sponsored by the Business Higher Education Council, shows that every dollar we invest in the higher education system produces 13 dollars in additional economic output in Virginia. It returns even more in new tax revenues to the Commonwealth than it costs. So it is one of the very best economic investments we can make for our people. But we are not just investing; we are also innovating and reforming – and the two must go hand in hand.”

Governor Bob McDonnell, on the creation of “Preparing for the Top Jobs of the 21st Century: The Virginia Higher Education Opportunity Act of 2011,” legislation that resulted from recommendations from his Higher Education Commission on Reform, Innovation and Investment. Jan. 17, 2011.

“The University of Virginia has submitted a Six-Year Plan that gives us a formal framework for aligning our priorities with key priorities identified by Governor McDonnell and the Higher Education Commission. We believe that the strategies identified in our plan will allow us to support the Commission’s goals while providing a greater educational experience for more students.”

Teresa A. Sullivan
President, University of Virginia

Introduction

The University of Virginia's mission has expanded since the institution first opened for classes in 1825, but Thomas Jefferson's core belief in the importance of a well-educated citizenry remains as vital as ever. We continue to believe that a highly educated workforce is critical to the future of our nation, not only to sustain democracy, as Jefferson stated, but also to create new knowledge, stimulate meaningful innovation, and advance new possibilities for citizens in the Commonwealth and throughout the world.

The Higher Education Opportunity Act of 2011

In an effort to make the Commonwealth of Virginia a leader in college degree attainment and in the national and international knowledge-based economies, Governor Robert McDonnell championed The Virginia Higher Education Opportunity Act of 2011 (HEOA) also known as the Top Jobs Act. The act provides a framework for increasing the numbers of Virginians who receive college degrees, stimulates economic growth, and diversifies research in the Commonwealth. In addition, the legislation requires that every two years each higher education institution submit a six-year plan addressing its academic, financial and enrollment objectives. By establishing a long-term link between higher education and job creation, the Higher Education Opportunity Act is designed to prepare Virginians for the top jobs of the 21st century.

The Six-Year Plan: Our Approach

The University of Virginia's six-year plan for 2012-18 reflects the institution's early commitment to The Higher Education Opportunity Act. Our plan reflects programs and general strategies that will advance the objectives in the HEOA, as well as initiatives that will enhance the quality of education, research, and service in the University's academic division.

U.Va. FACTS and FIGURES

- **Three divisions: Academic, Health System, and the College at Wise. Total budget: \$2.5 billion.**
- **Largest employer in Charlottesville with 13,739 employees.**
- **On-Grounds enrollment, Fall 2010: 14,039 undergraduate, 6,525 graduate students.**
- **One-year student retention rate: 97 percent.**
- **Six-year graduation rate: 93 percent.**
- **Research budget: \$314 million.**
- **Local spending by U.Va. units, employees, students, and visitors: more than \$1 billion**
- **One dollar of state support for U.Va. supports activities that result in \$3.45 of new spending in Virginia.**

The University of Virginia's six-year plan takes the following approach:

- Responds to all objectives of the Higher Education Opportunity Act
- Recognizes the need to limit future tuition increases.
- Reflects initiatives that reach beyond the undergraduate student population.
- Relies on funding partners (state, federal, private donors, and others) rather than just students and their families to meet the cost of all strategies outlined.
- Demonstrates continuous efforts at self-assessment and action to address our mission, even in areas where we may already be quite strong.

HEOA Academic Objective: Educate More Virginians

With a six-year graduation rate of 93 percent – the best among all public research universities and second only to a few private universities in the nation – U.Va. already achieves high productivity in higher education; therefore, we must meet this challenge by using our facilities, programs, and resources in new and creative ways. We have identified four major strategies to help meet the HEOA objective of more undergraduate degrees:

(1) Enroll more undergraduates

Consistent with the governor's proposal to produce 100,000 more degrees in the next 15 years, the university will enroll more undergraduate students, maintaining our ratio of enrolling 70 percent in-state students. Our new growth plan calls for enrolling 1,673 new undergraduates by the 2018-2019 academic year, an increase of 11.9 percent from 2010-2011. Of these, 1,171 students (70 percent) will be Virginians.

(2) Accelerate the time required for degree completion

We estimate that three-quarters of our first-year students arrive with advanced standing through Advanced Placement and other test credits; on average, these students have earned the equivalent of more than one academic semester before their first day of class. The exemplary credentials of many of our undergraduates allow us to think of ways to reduce the time in which they can earn degrees. To offer these undergraduates the opportunity for an accelerated degree – or degrees – would not only increase the numbers of graduates but also open available slots in subsequent incoming classes.

“3 + 1”: We are exploring the creation of a “3 + 1 accelerated degree program” that would allow motivated students to remain at the University for the

standard four years but earn both a bachelor's and a master's degree in certain programs. Public policy, commerce, Middle Eastern and South Asian studies, statistics and education are areas that could be amenable to a 3 + 1 format.

Summer Session: Accelerated degree programs will require that we make better use of our resources and classroom facilities throughout the summer. As student demand dictates we will expand the summer session which enrolled almost 8,000 students in summer 2011.

January Term: Established in 2004 as an opportunity for students to take an intensive two-week course and earn three credits, the January Term offers classes on University Grounds and in remote parts of the world. The number of students enrolled in January Term in 2011 included 928 on-Grounds and 208 off-Grounds students. Ten study abroad classes will be offered in January 2012. January Term will grow as we expand opportunities to include students from other institutions.

(3) Enroll additional adult students in the Bachelor's of Interdisciplinary Studies Program and other completer programs

Our completer programs, designed for adult learners who have some college credits and want to return to complete their bachelor's degree, are successful and expanding. The Bachelor of Interdisciplinary Studies (BIS) program – with a presence in Charlottesville, Hampton Roads and Northern Virginia – enrolled 251 students in fall 2010. In 2012, the program will expand to Loudoun County and Richmond. We are also working toward a new Bachelor of Professional Studies (BPS) program in collaboration with Piedmont Virginia Community College, which would initially focus on allied health fields.

Another success is PRODUCED in Virginia, a cooperative distance-learning program with the Virginia Community College System that helps meet the demand for a tech-savvy workforce. Students earn an associate's degree and a bachelor of science degree in engineering science, almost entirely without leaving their communities. The first class of engineers PRODUCED in Virginia will earn their BSE degrees in May 2012.

(4) Increase degrees in critical STEM fields (science, technology, engineering and math) and in STEM-H (-Health)

The Higher Education Opportunity Act links degrees with careers in high-demand fields such as science, technology, engineering, math and health. Increasing graduates in these fields is an important priority. We have

experienced a 26 percent growth in STEM degrees and a 25 percent growth in STEM-H degrees over the past decade. Our target is to increase the strength of the Commonwealth's STEM-H workforce by enrolling 33 to 40 percent of first-time undergraduates in STEM-H fields.

It should be noted that as enthusiastic as we are to support the Governor's proposal to graduate more Virginians and prepare them for top jobs in our economy, an increase in faculty members must accompany an increase in undergraduate degrees. Faculty members teach and lead students in the research that creates new knowledge. In the critical STEM-H fields, for example, we estimate an average cost of \$600,000 per faculty member over three years for lab space, equipment and research staff. An inability to hire these faculty members for lack of one-time startup funds will create a bottleneck in our ability to expand STEM-H fields. Similarly, we cannot create a greater number of degrees in any field without additional resources to hire more faculty members.

We also recognize that financial aid is a vital component in educating Virginians. Our nationally acclaimed financial aid program, AccessUVa, has provided 100 percent of need through grants to low-income students and loan-capped packages for middle-income students since 2004. In the 2010-11 academic year, 4,702 students (32.8 percent) demonstrated financial need, and the average aid package was \$17,932. The program's cost is rising – it was \$83.3 million in 2010-11 – and requires a larger portion of tuition revenue every year. We are looking for ways to contain the rising costs yet keep our undergraduate student body academically qualified and socioeconomically diverse in the face of looming federal cuts to student aid programs.

HEOA Objectives: Diversify Research and Promote Economic Growth

The University plans to foster new strategic research opportunities in key areas including sustainability, biosciences, energy, K-12 education, defense intelligence and the medical cancer, cardiovascular and neural specialties.

Cancer research, as an example of economic contribution to the region, enhances patient care, health and the economy; creates jobs, new ventures and licensure revenue; and attracts additional external funding. A study by the Weldon Cooper Center projects that the economic impact for the region from the University's Emily Couric Clinical Cancer Center is \$75 million in salaries and revenues from a \$5 million investment. We plan to request \$5

million in state support to expand clinical trials and outreach to Southwest Virginia.

Commercialization opportunities and innovation partnerships will increase, and we will continue to seek opportunities to create public/private partnerships to expand research opportunities and new ventures, such as the Rolls-Royce collaboration with U.Va., Virginia Tech, Virginia State University, and John Tyler Community College. We will also enhance proof-of-concept funding opportunities modeled after the highly successful Coulter Translational Research Partnership, which has in a very short time produced a 7:1 return on investment. In the 2013-14 fiscal year we will seek state funds of \$5 million to match private contributions to develop the U.Va. Innovation Accelerator, a public-private partnership designed to facilitate knowledge transfer and business development around university research and innovation.

Our Most Valuable Resource

Employees are the University's most valuable resource. In order to attract and retain the best talent to support its academic mission, the University must remain an employer of choice among institutions of higher education. Thus, our budget priorities reflect the critical importance of merit-based investments in the highest quality faculty and staff.

Prior to the economic downturn, the University had made great strides in faculty compensation to become competitive with our peer institutions. We have lost important ground during the past five years and are struggling to regain our position. Our lagging faculty salaries need to be increased to the 60th percentile of our peer institutions, as identified by the State Council for Higher Education in Virginia. There is a \$13,754 gap between that 60th percentile goal and our rank in the 26th percentile.

The University Staff program bases compensation on market-based pay with incentives and rewards for career development and performance. The goal is to have our salaries at the 50th percentile of these competitive market pay ranges, but University staff salaries lag the market by 7.88 percent. The University's classified employees work under a compensation scheme determined by the state, which should also consider the competitive position of staff salaries.

Efficiency in Processes, Use of Facilities and Technology

The University always strives for greater efficiency. Examples of our efforts can be found at the following web site:

<http://www.virginia.edu/processsimplification/>. One of the top priorities of President Sullivan's first term is the development of a new internal financial model that provides revenue centers with a transparent resource allocation and decision making process, a more effective long-range planning tool, and incentives for entrepreneurial activity and prudent stewardship of resources.

While it is true that more efficient use of existing resources and facilities will accommodate enrollment growth and increase our productivity, we should acknowledge that U.Va. is already a national model of efficiency. For over 20 years, *U.S. News and World Report* has ranked U.Va. among the top 25 institutions, public and private, in the country. In each of these 20 years, the University has also been the most efficient among the top 25 public and private institutions as measured by comparing our quality ranking – which is *high* – with our expenditure per student – which is *low*. We consistently rank high in *Kiplinger's Personal Finance* magazine "100 Best Values in Public Colleges." This year, we ranked #3 in the nation for the fifth time in six years.

The use of technology to enhance instruction gains ground with each academic year. The University's latest venture is a partnership with three other Virginia public institutions (Virginia Tech, James Madison University, and George Mason University) and CISCO Systems in which we will deploy CISCO's Telepresence technology to share instructional resources across our institutions. Our collaborative efforts are focused on five areas: 1) sharing in the instruction of strategic languages, 2) increasing the pipeline for STEM students, 3) redesigning courses to increase scale, enhance learning outcomes, and drive per student cost down, 4) enhancing dual enrollment classes aimed at high school juniors and seniors in STEM areas, and 5) enhancing research competitiveness by leveraging technology investments already made by each institution.

Conclusion

Starting from a solid foundation of proven performance, our six-year institutional plan includes programs and strategies that align with the objectives of the Higher Education Opportunity Act: find new and better ways to increase the numbers of undergraduate degrees, stimulate economic development, and diversify research. At the same time, these strategies align with Jefferson's vision to enrich the quality of education, research and service

that the University of Virginia will provide to its students, the citizens of the Commonwealth, and the world.

Governor McDonnell and the General Assembly have clearly stated their priorities for higher education in the Top Jobs Act. Many of these priorities — enrolling and graduating more Virginians; granting more degrees in science, technology, engineering, and math; enhancing research collaboration among colleges and universities; using technology to teach in creative new ways; and using our institutional spaces more fully and more efficiently — align well with our vision of how the University of Virginia can support these priorities.

To do all these things, we must have adequate housing, dining, recreational facilities, need-based financial aid, and faculty and staff to serve the new students and protect the quality of the undergraduate experience for all our students. To that end, we will need to work together with the governor and members of the General Assembly to ensure appropriate state funding for the additional Virginians we will serve.

Teresa A. Sullivan
President, University of Virginia