

Dean's Update

Arts & Sciences Council, Duke University

Laurie L. Patton

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I am delighted to give you a quick update of what we have accomplished in these first nine months of our work together. There is much to share. I will begin by saying that I have been given the support and resources during these first months to accomplish more than I ever thought possible. The fit between the concerns of the faculty and my own sense of the directions in which we need to go have been extraordinary. And, as we worked together on the themes of innovation, adaptation, integration, we came up with several compelling paths forward that I am quite excited to pursue during our next few years together. As per my usual presentation pattern, I will first be talking about the budget.. Second, I will be catching up on the exciting things we've been doing. And finally, I will discuss some basic elements of the campaign.

First, let me begin with an update on advising. Throughout my first few months, I heard a lot from faculty, alumni, and students about our advising system—what is working and what can be improved. I have begun a set of conversations with Dean Lee Baker and Beth Fox, the Director of the Academic Advising Center, about how we can work toward making advising better. This year we have made several strides. Last fall, at Trinity Board meeting, we talked about advising and major choice and what we have done partly in response to our conversations with faculty, board members, and students. We have made four major moves in advising and three major moves in helping students with their decisions on majors. Related to advising, with thanks to the leadership of Beth Fox and Lee Baker, we have developed the first and only global advising program in the country—tasked with integrating the global curriculum into our Duke offerings. Global advisors have met with about 500 students and 99% of those students indicated by a survey that their experience was good to excellent. These advisors have had a lot contact with students to help them address how to fit their global ambitions for their education into their Duke career.

We also created a peer-advising program, which is one of the things that came up in my conversations with faculty. We have deepened the existing program that by adding 14 juniors and seniors who provide both a “student-view” of advising to undergraduates and coordinate academic exploration and programming. Exploration, and the freedom to try our options within our curriculum, is a big theme that comes up in all my conversations with faculty, board members and students. The peer advisors also take a course in academic leadership in the fall to prepare them for this important role.

I will pause here for a second and remark that one of the things I have noticed this year is that we could do better at helping students reflect more seriously about their educational experience. I want to create opportunities for getting students to think about what their education means overall.

We have created a little more flexibility in the number of students our volunteer academic advisors can choose to work with, and improved the advising resources that the advisors themselves receive. One of the things the volunteer advisors felt they needed was more direct vision of the liberal arts from Duke's educational leaders. We will be creating a packet for advisors to give students and parents so that they can better understand the aims and opportunities of a liberal arts education. There is a lot of writing on this topic by the divisional deans, myself, Peter Lange, Steve Nowicki and Dick Brodhead. We are going to do more to get that material out there.

We have developed a better advising structure for first generation students—those joining us who are the first in their family to attend college. We want to help our staff be a little more focused on the first generation experience. We have developed a cadre of advisors who are specifically trained and oriented to guide these students. Some of these advisors are first generation folks themselves and understand the unique challenges and issues, but we are trying to be sensitive and make it low-key so as not to stigmatize those students in any way. We have also tried to create a more student-centered approach to mentorship, rather than what we call an “academic transactional” model. We want to move beyond the “academic checklist” in as many ways as possible. In my first months, I have indeed heard a lot of concern about that “checklist” in advising. It is a big concern for all of us. In future years, I hope we can find ways to have more in-depth conversations with each student about his or her life-course.

In my first months, I have also heard a lot of conversations related to major choice. We have been focusing mostly on the STEM fields this year for a number of different reasons. Here again, I want to mention major leadership from Lee Baker. You may remember we mentioned in my last address the biology gateways being rebuilt, and it has really changed people's experience of biology by focusing on major questions in biological research and not just “subjects to be covered.” Many of you have also heard about the Chemistry 43 flipped classroom. Chemistry professor and new chemistry chair Steve Craig did simply a wonderful job with that. I also think this change in the way chemistry is taught has had an added effect of bringing more people into the study of chemistry. We are very concerned that students who want to major in the STEM fields are allowed to thrive. And as deans, we have been led by Robert Calderbank, who has observed that we do not want to get into an unproductive kind of conversation that is only about the retention of students in STEM fields. Rather, we want to ask what the institution can do to invite them into the STEM majors. We also have continued expand our enhancements in STEM fields and have begun to build structured study groups under the aegis of the SAGE program run by the Academic Resource Center. This has been a successful model in many ways and, thanks to Lee Baker, Duke has had a very aggressive focus on this.

We have mounted a project called “Major Influence,” soon to be displayed in various places throughout campus. This photographic exhibit features alumni who majored in the social sciences, humanities and sciences who discuss what their major meant to them and how it has affected their life course. We now have a set of archives of Trinity graduates talking about what their lives are like now and the long-term role of their major course of

study at Duke. This kind of resource helps students visualize possibilities and more openly explore and engage with Duke's curriculum options.

As a further update, I would like to welcome Deborah Hill as the new associate dean for communications for Arts & Sciences. Deborah is a very dynamic and wonderful addition to our staff. She comes with many years experience and accomplishment at the Pratt School of Engineering, and she brings a great enthusiasm and breadth of vision for all we do in Arts & Sciences. I also want to pause to thank Senior Associate Dean Lee Willard as well as Associate Dean of Technology Ed Gomes, because they stepped up and did the work of the communications dean before Deborah joined our team. It is our first professional search for this important function for the school, and the results so far have been outstanding.

I also want to mention briefly the Roger Williams' gift of \$1.4 million to the school. This is a wonderful example about how planned giving—essentially estate planning—can make difference to the Arts & Sciences. We are tremendously grateful for this gift. As I go into the discussion of our budget, you will better understand why gifts such as Roger's are so important.

Let me turn now to the budget. The good news about the budget is that we have presented a balanced budget for the 2012/2013 academic year. This fact is due to the fantastic leadership of Sandy Connolly, our Senior Associate Dean for Finance and Administration. Achieving this was a very big challenge, as you are aware, and we are not out of the woods yet. Going forward we are facing a very big challenge because we must maintain a balanced budget going into 2012/2013, and we have significantly increased expenditure pressures. So we must continue to look for ways to increase revenue and reduce expenditures. Undergraduate tuition is our biggest source of income at 83%, followed by indirect cost recovery in the range of 7%, and unrestricted annual fund dollars, which are roughly 5% of our revenues at \$14.5 million. Looking at expenditures, faculty compensation runs at about 31%, closely followed by general and administration costs for units that are typically non-revenue generating such as the library, Chapel, etc. Undergraduate financial aid is 20% of our expenditures. Staff compensation runs around 10% of our budgeted expenditures, closely followed by direct space costs in the range of 7% at around \$20.7 million.

Because the annual fund is so critical to our operations, I want you to understand how annual fund giving has recovered since the dramatic economic downturn that has so affected the university across the board. We have recovered very well from the low in the 2008/2009 giving year, and anticipate this being a very good year, given the rate and size of gifts coming in to the annual fund. And remember, these are not just a few large gifts; these include many, many small gifts from alumni. We are so grateful for this support, and I want to take a moment to thank each of you for your continued support and leadership here.

I also want to take a moment to explain the real cost of hiring faculty—beyond salaries and fringe benefits. When we hire faculty we have startup costs to help them set up their labs and research, although of course this varies widely according to discipline.

But there is also a cost associated with simply providing the space these faculty members need. This can often mean we need to fund building renovations, and this impacts our management and operations bottom line. Faculty also need graduate students, and this affects that infrastructure as well—requiring fellowship support, space for graduate student offices.

I want to talk about both the indirect and direct revenue from research grants to faculty in Arts & Sciences. We are experiencing steady growth, but 2011/2012 is the last year we will have American Recovery and Reinvestment Act (ARRA) funding. While we appropriately did not plan infrastructure around this short-term infusion of research funding, we will feel an impact now that those funds are exhausted.

So going into the 2012/2013 year, our biggest challenge is managing the walk-down of strategic initiative (SIP) funds we received from the Provost. We currently have 24 faculty supported by SIP funds, and they will all need to be transitioned to support within the A&S budget. This translates into a walk-down per year for the next three to five years. We are also receiving monies for faculty startup support and will need to manage a shortfall as part of the withdrawal of that SIP support. We also have a shortfall in the undergraduate research program.

In the 2012/2013 academic year, we are planning to bring 13 faculty members currently on SIP into the A&S budget. Recall that we were able to do this and submit a balanced budget. This is a real progress. We will also try to depend less SIP funds for future hires. Given our budget constraints, this creates a budget problem that can only be solved by faculty attrition as faculty members choose to retire. This will limit our growth, and that is always a challenge. But it can also affect our ability to retain faculty members who are recruited elsewhere. We will not automatically be able to backfill that faculty position, which creates challenges within departments to ensure that core teaching and research needs are addressed. We have made significant progress in transitioning faculty salaries from SIP support to the A&S budget. We are doing well, but we are not out of the woods yet.

In the natural ebb and flow of faculty moves in higher education, we are still able to hire, just at thoughtfully planned level. I want to show you some of the stellar faculty we have been able to hire in the 2012/2013 academic year, and there are at least five more negotiations in place on top of these hires. You will note that many of these faculty are at the junior level, and this helps us address a somewhat aging faculty base in the humanities. I am very pleased with the quality of faculty we have been able to recruit. And now I have to share news of a truly significant hire for Duke. We have recruited Martin Reuf of Princeton as the Egan Chair in Entrepreneurship. Martin is the leading scholar in entrepreneurship and will take the helm in the development of a “Building Entrepreneurship and Innovation Program” over the next year in partnership with Kimberly Jenkins and other campus leaders.

I also want to explain what priorities and values we are using to make our faculty hiring decisions, given our constrained situation. We are prioritizing junior hires over senior searches. We are prioritizing searches to assure renewal opportunities across

departments—and this means being very thoughtful and purposeful about encouraging interdisciplinary scholarly collaboration. We are being very strategic, and keeping in mind department development plans and opportunities to influence departmental rankings advancement. We are hiring with a mind to responding to serious teaching needs, and we are giving thoughtful priority to pending searches that have carried over from the 2010/2011 academic year.

You might also want to know what we are doing to further contain costs and positively influence our budget. We instituted an energy conservation committee, which includes faculty and administrators, to look for ways to reduce energy consumption and implement energy efficiencies. We instituted a modified business manager and staff assistant model so that smaller, adjacent academic units can share staff members and receive better service and efficiency. This is working very well, and I want to thank Sandy Connolly for her leadership in making this happen so well. And we continue to work with Duke's Administrative Reform team (DART) to integrate opportunities within A&S to broader efforts at Duke.

We have a very serious need to increase revenues for Arts & Sciences. We are looking at many options, including growing the annual fund and increasing sponsored research through interdisciplinary proposals. We are working to expand revenue generating Summer School programs, and looking at Continuing Studies in an entrepreneurial way. We are also considering the business merits of an alumni university, and considering developing additional Master of Arts and Master of Science programs. In addition, we have instituted a reduced tuition rate for Duke University employees, which we anticipate will increase enrollment by this group, which directly supports our cost recovery. And perhaps more important, we are charging for the use of our facilities during the summer sessions. Other schools at Duke have already been doing this—so we are claiming our value, especially given that we are paying for the maintenance and upkeep of these facilities. This just makes good sense.

Now I want to shift away from the budget discussion and talk about what we have done this year. As you know, interdisciplinary scholarship is a strong focus for us. Duke has a great reputation for being very open and encouraging to interdisciplinary collaboration among faculty. We hear this quite enthusiastically from new hires who remark in wonder at the acceptance and support for this kind of work here.

I want to especially compliment Robert Calderbank, dean of the natural sciences, for his leadership in the area of big data. He is cultivating a center of gravity, so to speak, around the idea of “big data” and looking at how cross-disciplinary scholar teams can advance research in this area. We seek to improve our training of students to thrive in today's fast-paced, global, information-rich work environment where complex, big data sets are becoming the norm. Robert and his teams are asking the question: does our curriculum train students from all majors to work in big data environments, and how can we do better? What kind of technology infrastructure -- from networking to storage to visualization-- is needed to fuel both research and education in this area? What kind of technical staff is needed?

Looking at this from an entrepreneurship perspective, does the rapid rise of companies such as Facebook and Groupon mean the barrier to innovation is lower in the information economy? What are the opportunities to integrate entrepreneurship into our curriculum and overall educational experience? And as salient, how can we gain insight that will help us best leverage the upcoming capital campaign?

The “big data” idea and implications are very cross-cutting. Robert’s committee in this work includes individuals from economics, mathematics, statistical science, neurobiology, visualization technology, the library, English, computer science, business, radiology, psychology, engineering, molecular genetics, microbiology, art history, and philosophy. Ed Gomes, our senior associate dean for technology services in Arts & Sciences, is also part of this team, with Keith Whitfield of the Department of Psychology & Neuroscience. The Big Data group is exploring different themes, such as Digital Humanities, Information and the Brain, Network Science and Information and the Tree of Life.

In the social sciences, I want to talk about efforts under the leadership of Angela O’Rand, dean of the Social Sciences here at Duke. She is working to capitalize on Duke’s 50-year old position of leadership in interdisciplinary studies of human development from birth until death. Her goal is to increase the presence of aging studies in the undergraduate experience, including global studies of childhood, adulthood and old age. This is a unique experience base at Duke that we want to integrate into our undergraduate curriculum.

Angie has established an interdisciplinary working group and will launch an invited lecture series in the spring of 2013 through the spring of 2014. She is looking for outside funding to support undergraduate research in the social sciences and neurosciences that expands on the populations across time theme. She hopes to establish interdisciplinary doctoral and postdoctoral training programs in this area. Two of her partners in this effort are Terrie Moffitt and Avshalom Caspi, both of whom spoke to the Trinity Board of Visitors at their recent meeting.

In the Humanities, I want to briefly discuss work led by Srinivas Aravamudan, our dean of the humanities. You have undoubtedly heard about the \$6 million Humanities Writ Large project, funded by the Mellon Foundation. We have launched three humanities labs: the Haiti Lab, BorderWork(s) and GreaterthanGames. These labs all seek to nurture discipline-crossing research across the humanities, interpretive social sciences and other Duke schools and research units.

We have launched six emerging networks exploring topics such as arts and economics, medical humanities, performance and media, viral narratives, new pedagogy for history majors, and student curation of an art exhibit on gender. We hosted three visiting faculty fellows in the spring of 2012, and will host four more during the 2012/2013 academic year. These faculty conducted their own research in collaboration with Duke faculty and staff, and are actively engaging with our students through student research projects.

We also hired a digital humanities technology consultant, now at home in the library and serving as a global resource for Duke faculty, staff and students. And we have supported \$137,250 in undergraduate humanities research. I am very pleased with the impact of the Humanities Writ Large program as a venue to influencing and enhancing how our faculty and students engage with humanities here at Duke.

In other news, you may recall that last fall we emphasized the importance of public scholarship. I am delighted to report that I will be announcing a new initiative in public scholarship this spring, led by Laurent Dubois of the Romance Studies Department. Laurent is leading the Haiti Lab under the Humanities Writ Large program, merging research, education, and practical applications of innovative thinking for Haiti's disaster recovery and for the expansion of Haitian studies in the U.S. and Haiti. The public scholarship initiative will leverage already existing partnerships between Duke and Durham, and better capture all the good outreach and public scholarship already going on across the departments. We will launch a speaker and seminar series in 2012/2013. Stay tuned!

Another priority we discussed in the fall was improving diversity in the sciences. This spring we sponsored a conference celebrating the first female physicist at Duke, Hertha Sponer. This was an empowering venue to explore the life, and research and teaching contributions of Dr. Sponer. We have hired new faculty with an eye to enhancing diversity among the faculty ranks, and reconstituted the women in science and engineering (WISE) leadership group. In the future, we plan to co-sponsor a WISE conference for graduate and undergraduate students and sponsor a national "Women in Statistics" conference, as launch a nation-wide database of women in science.

We remain deeply committed to increasing the emphasis on Asia across our curriculum. This spring we hired Edmund Malesky in the Department of Political Science. We are working with the Asian/Pacific Studies Institute and the South Asia Center at Duke and relevant departments to create strategic plan for hiring focused on expertise on China and India. We have created an India collaborations committee with Arts & Sciences in the leadership role.

And we continue to explore opportunities for global education (study abroad) where there is an equal exchange of educational goods—meaning both Duke and the foreign institution receive equal benefit and exchange of students and the resulting intellectual growth and collaboration. We have begun the process for approval of courses at the emerging Kunshan campus in China, established a partnership with Shangdong University to send physics students to Duke, and supported and engaged with two new pilot programs in global education: Duke Immerse and Duke Intense Global.

Along those lines, we are seeing significant progress and success in exploring teaching innovation at Duke. This spring, we launched a flipped classroom initiative, funded a "WIRED!" classroom for the second year in a row, and hosted a university course on Food Studies that attracted 110 students. The University Course was so well received that we are hoping to make it a tradition, and create a "pedagogical commons" whereby the whole university can gather around a single issue every year. Through Martin Ruef, A & S

will be inaugurating an Entrepreneurship and Innovation Fellows program, to bring key entrepreneurs from a wide variety of industries to meet with Duke students and explore best practices and challenges in the practice of Entrepreneurship and Innovation. We have already been discussing candidates for the fall. We are also partnering with the Pratt School of Engineering to create a university learning pathway for entrepreneurship and innovation, and hope to launch a student-focused curriculum in the fall of 2012. In parallel, the Fuqua School is working to establish internship opportunities across the disciplines to provide hands-on opportunities for students to engage with the practice of entrepreneurship and innovation.

Regarding Duke's vision for entrepreneurship, under the leadership of former Trustee Kimberly Jenkins, I want to take a moment now to thank Robert Calderbank for taking the lead on this for Arts & Sciences, as well as Lisa Keister and Martha Reeves of the Markets and Management Studies certificate program, and Lee Baker for his work with the Pratt School on expanded undergraduate curriculum options.

To borrow a quote from Mary Godwyn:

Conceptually, the liberal arts and Entrepreneurship and Innovation share the same critical, forward-thinking orientation: they involve the study and analysis of what is (for example, the current state of the economy, social justice, citizenship and community affairs, business environments, and public and private needs) and, by identifying and evaluating opportunities for improvement, consciously contribute to what will be.

This distinction is also what separates an entrepreneur from a mere business owner. Entrepreneurship is a tangible, practical manifestation of a liberal arts sensibility. By situating entrepreneurship within the academy, we can legitimate the practical, material dimension of the discipline to the degree that entrepreneurship shares the values of the liberal arts: commitment to self expression, debate, creativity, problem solving, and the ongoing articulation of the mutuality of social responsibility and personal identity.

And now I want to return to some of my own leadership themes of innovation, adaptation and integration, which have strongly ground my efforts here at Duke. I have launched several new "best practices" so to speak, that I want to mention. We are now hosting open faculty forums on topics such as integrating the curricular with the co-curriculum, integrating technology into the classroom, to name a few. Such venues are a way to signal both strategic direction and overarching "values" to the faculty, and provide a way for them to engage and cross-pollinate ideas and experiences.

I continue to host faculty lunches, including the chair of the Arts & Sciences Faculty Council. I joke that at this rate, I will have met each of the A&S faculty by sometime in mid 2013. And I am organizing workshops for chairs to help them learn about and deal with faculty mentoring, diversity and tenure and promotion issues.

Looking ahead to the campaign, let me go over some details. First, as you know, we are still in the silent phase of the campaign, and Duke plans to officially announce the

campaign and our public fundraising goals this fall. There is a theme and specific branding for the campaign, and although I have seen it, I cannot talk about it just yet.

Our total Arts & Sciences fundraising goal is generated around “buckets” with the labels of financial aid, the undergraduate experience and building the faculty. To bring more detail to that, for us in Arts & Sciences, this means securing support for more undergraduate research, new undergraduate experiences in science learning—which may encompass designing new space, and innovative advising. Our financial aid pressures increase every year, and I know you are familiar with this, so I won’t talk more about that except to say that we understand fundraising for financial aid needs to be presented differently than it was in the Financial Aid Initiative, completed a couple of years ago.

On the faculty support front, we are looking to establish new faculty support in light of the likelihood that our primary sources of federal funding, the National Science Foundation and National Institutes of Health, are very likely to see budget reductions. At the same time, we want to establish a stronger faculty core and collaboration around “Big Duke” initiatives such as global health, energy, arts, and entrepreneurship.

Now let me give you an overview of Duke’s progress to date in the campaign. Duke is 33% towards the overall goal. In Arts & Sciences, we are 32% of the way towards our goal. We hope to have reached 35 to 40% of our goal by late September. We are looking toward our Board financial leadership to help us get to our 40% goal in 2012. We are asking that members consider making Arts & Sciences a priority during the public phase of the campaign.

And now I want to come back to finish the story about the Roger Williams gift that I hinted about earlier in this talk. Roger set up 8 gift annuities between the years of 1991-1993. At the time, he received a charitable tax deduction for his gifts. For 20 years, these annuities paid Roger an income. During that time, the annuities were invested with Duke’s long term investment pool managed by DUMAC. At the time of Roger’s death, those gifts had grown to \$1.4 million in unrestricted funds for Arts & Sciences. As you have just heard the scope of our financial challenges, you can imagine what an amazing boon this is for the school. This story really illustrates the power of time in investing.

In closing, I want to thank the faculty for its excellence in research, teaching, and service, and for its strong tradition of faculty governance, and its collegiality and support. I also want to reiterate that I have been given resources and encouragement at Duke to realize more educational dreams than I ever thought possible.

Thank you!