



ATG¹ Brief | Leadership blog post, September 2019

Deep Learning in the Age of Disruption: Hopeful Times for Higher Education

David V. Rosowsky, Ph.D.

We are, without question, operating in one of the most challenging, rapidly changing, and also hopeful times for US higher education. Such a bold statement demands, and deserves, some explanation. The challenges facing US higher education writ large, and public higher education in particular, are well known. We have watched as both costs and expectations have risen while public support has declined. We have seen the popularity of traditional academic majors ebb and flow, while new fields of study and entirely new disciplines have evolved, demanding new resources and new expertise. We have seen our traditional student markets decline, while we all compete for elusive new geographic markets (both domestic and international) and non-traditional (fast becoming ‘new traditional’) students. We are doing more with less, reaching farther away from our traditional and comfortable campus boundaries, and having to compete for resources, rankings, and talent with institutions that are, like us, becoming more sophisticated and more strategic.

As a group, students turn over and evolve faster than faculty. Campus facilities are struggling to keep up with both. Investments in student services, IT infrastructure, health and wellness, and core research facilities are demanding increasing percentages of the budget. And we are becoming more dependent on graduate and professional degree tuition revenue, research indirect, private and corporate philanthropy, and non-degree activities to generate the revenue needed, not only to meet expenses, but to invest in our faculty, facilities, programming, and both physical and virtual campuses.

And there is the national political landscape that seems to be bolstering and in some cases creating divisions. We are a nation increasingly divided, exhibiting little respect for and even less confidence in our leaders, and (it seems) increasingly willing to ignore facts and accept falsehoods. Civil discourse is being replaced by angry, divisive partisanship and ideology. Science is invoked inconsistently and understood even less. The ubiquitous nature of and access to information (true and false, complete and partial) has made it easy to bolster one’s position without having to acknowledge the existence of contradictory viewpoints or even ideas. We are

¹ *Across the Green* was started as a series of periodic letters from Provost Rosowsky to provide updates on current initiatives and information on topics of interest to the broader UVM academic community. Started in 2013, *Across the Green* was published three times per year during the six years Dr. Rosowsky served as UVM’s Provost and Senior Vice President. The *ATG Brief* series continues in the spirit of this communication with topics focused on higher education and leadership.

relocating to the extremes where it is simpler, more absolute, and cleaner; rather than the more moderate middle where it more complicated, more nuanced, and often messier. We have become a nation of absolute positions rather than one built on dialog and debate, thoughtful discourse, and inclusion of ideas. We choose to dig in rather than engage in discourse that might expand our thinking. We are less receptive to such expansion. We choose to stand with people that look like us, sound like us, think like us, and believe what we believe. We choose our media and news outlets similarly. It is hard to aspire to be truly inclusive when we are increasingly partisan, divided, ideologically focused, or intellectually isolated.

America's colleges and universities, long the envy of the world – though, like much of our nation, facing challenges to our long held dominance – are structured as communities for expansive learning. They are creating new knowledge, leading the way in scientific advances, and driving social innovation, equity, and justice. But they also are accused of being too liberal², indoctrinating students rather than truly educating them, and shielding them from disparate viewpoints. Colleges and universities are being accused of pandering to students, being overly solicitous and overly accommodating, and failing to prepare students for “the real world.” Coupled with the increased scrutiny on the value of higher education, rising costs to families (largely a result of decreased state support, but also driven by increased federal compliance mandates and increased expectations of the university by students and families) and the perception that a college education is not necessary to achieve success, US higher education finds itself at risk of marginalization.

Wow.

So how, after all that, can I assert that this is one of the most hopeful times for US higher education?

First, where our nation has faced its greatest challenges, colleges and universities have always come through. Whether with innovation, cure, justice, knowledge, discovery, or mission expansion – America's higher educational institutions have stepped up and delivered. We are technological and social innovators. We are explorers and scientists. We are artists and educators. Social movements take root and thrive on our campuses before moving out into the broader society. Medical discoveries and scientific breakthroughs happen every day at our universities. We model ideals of inclusion and work tirelessly every year to achieve ever higher goals and ever broader scope. We literally created the terms interdisciplinary and transdisciplinary, service learning, and flipped classroom. And all of this during a long period of decreasing state support, escalating costs, and unfunded federal mandates. We have never thrown in the towel. We persevered and we innovated. We adapted and we thrived.

² Liberal education, the cornerstone of American higher education, never referred to the teaching of liberal ideologies, but rather referred to providing students with liberal (broad) education across the disciplines. Liberal education was about learning to learn, to synthesize, to engage in deep learning, to be a complete and learned member of society. It was the ideal of the broadly educated individual capable of functioning as an informed citizen in a democracy. It was not political. It was, in fact, quite practical. It was not ideological, it was idealistic.

My vision for the University of Vermont was to be a leader in higher education, a model for adaptation and evolution, and an exemplar in delivering a truly liberal education. We set ambitious goals and executed on bold strategies and initiatives to realize that vision. In many ways, we were fortunate. We were neither too large nor too small, nor were we constrained by excessive state oversight. I believed strongly that we *could* and *should* be more nimble and more creative than the larger public research universities in our peer and aspirant comparator set. And I believed strongly that we were more mission-driven and more socially engaged and connected than our private comparators. We could model deep learning, discovery, civility, and intellectual discourse – the ideals of liberal education. As provost, I frequently offered commentary and vision, and where possible leadership, to accomplish this at UVM. I continue to hold strongly to these convictions and will work, wherever appropriate and invited, to drive our university toward these goals.

I always believed Vermont was less about being fearless and boundless than it was about being purposeful and sensible. But that doesn't mean we stand still, ignoring opportunity or need, grounded only in history without an eye or an appetite for what comes next. I continue to believe the University of Vermont should be bold, assertive, forward looking and forward leaning. We can, if we choose, commit to defining liberal education for this and the next generations of learners. This is what I mean by becoming a model for adaptation and evolution and an exemplar in delivering a truly liberal education. American philosopher and educator John Dewey (B.A., Vermont, 1879; Ph.D., Johns Hopkins, 1884; faculty member at Michigan, Minnesota, Chicago, and Columbia) would be proud.

Excerpted and adapted from January 2018 *Across the Green*,
<https://www.uvm.edu/~provost/davidrosowsky/Across%20the%20Green%20Jan%202018.pdf>



David V. Rosowsky is Professor of Engineering at the University of Vermont and served for six years as UVM's Provost and Senior Vice President. These personal reflections are based on 15 years of experience leading organizational and institutional change in higher education. Prior to joining UVM in 2013, he served as Dean of Engineering at Rensselaer Polytechnic Institute, and before that as Head of the Zachry Department of Civil Engineering at Texas A&M University. He previously held the A.P. and Florence Wiley Chair in Civil Engineering at Texas A&M University and the Richardson Chair in Wood Engineering and Mechanics at Oregon State University. He is a Fellow of the American Society of Civil Engineers, the Structural Engineering Institute, and the Institute of Science, Technology, and Public Policy at the Bush School of Government and Public Service at Texas A&M University. In 2019, he was a Fellow and member of the inaugural cohort of the Association of Governing Boards (AGB) Institute for Leadership and Governance in Higher Education.

Twitter: @DavidRosowsky
LinkedIn: David Rosowsky