“Virginia Tech will embrace a *Culture of Innovation* as a core strategy to make the quantum leaps necessary to lead in a world that is changing at an unprecedented rate.”

**Introduction**

Did those responsible for planning VPI&SU’s future in the early 1970’s foresee the personal computer and the Internet? Did Tech’s environmental scan in 1980 envision a reversal in the balance of state support? Did our plans twenty years ago anticipate an influx of for-profit colleges offering students a wide range of asynchronous learning options? Of course not! These things were largely unforeseeable.

Organizations that have adapted well to momentous and accelerating pace change in society have been alert to the environment, used resources in a way that embraces risk, and been organizationally nimble. Those organizations that have failed to cope with change—much less shape it — have been less aware, progressive, and flexible. Virginia Tech must continue to embrace an organizational ethos that is adaptive an innovative.

We don’t know what the next Big Idea will be, from what continent it will come, or when it will come. We do know that change will continue to accelerate and that the status quo as we perceive it will always be on its way out the door. Our goal is to frame the challenge and suggest the means by which Virginia Tech can foster a culture of innovation that is acknowledged and admired world-wide. To make this our stated goal is to propose that we treat the dizzying pace of contemporary change not as a problem, but as an opportunity, and that we continue and expand the creativity and innovation that have always marked our best efforts and contributed the most to our reputation.

**The Goal**

For the university to foster a culture that supports faculty, students, staff, and partners to express innovative solutions to the world’s grand challenges and to do so in a virtual *public square*, encouraging sharing and cross-pollination of ideas and meaningful involvement in communities from local to global.

- **In learning:**
  Innovating in pedagogy, recruiting, degrees, and collaborative external partnerships to enable real-world experiences for the next generation of skilled learners, critical thinkers, change agents, and entrepreneurs.
Goal Statement – DRAFT

- **In discovery:**
  Innovating the risk/reward structure of experimentation, collaboration within and beyond the geographical boundaries of the institution, evaluative measures of success, and commercialization of our discoveries.

- **In engagement:**
  Innovating our means and methods as a global land grant university for reaching, engaging, and enhancing the economic vitality and quality of life for our local, regional, national, and international communities.

- **In administration and management:**
  Innovating the alignment of our culture, people, structures, work processes, finances, incentives, and technologies by creating internal “think and do tanks” with a mission to help seed academic and administrative leaders with well-vetted tools, technology, and the financial resources necessary to foster innovation in their own units and across the enterprise.

**How We Get There:** A roadmap to reach a new Culture of Innovation to support substantial advances

- **Embracing a Culture of Innovation does not mean:**
  - Having a crystal ball,
  - Disregarding traditional principles or values,
  - Repeating history, or
  - Changing for the sake of change

- **Embracing a Culture of Innovation does mean:**
  - **Identifying and lowering barriers to innovation in our institution**
    - Ensuring that our institutional economic and resource models support innovation
    - Recognizing and addressing cultural barriers
  - **Promoting experimentation and risk taking while studying and learning from the outcomes**
    - Establishing safe areas for testing and piloting new ideas (“sandboxes”)
    - Rewarding and recognizing innovative enterprises alongside traditional results
    - Expecting efforts to question and challenge existing practices
  - **Fostering collaboration and novel interactions**
    - Within the university
    - Between the university and our communities
    - In our communities
Goal Statement – DRAFT

- With new partners and new types of partnerships
  - **Rethinking education with the view that every person is an educator and every moment an opportunity for learning.**
    - Engagement through relationships and collaboration are at the heart of innovative practices and Virginia Tech must insist on a robust learning environment both inside and outside the classroom.
    - Thinking beyond the physical campus as the learning environment and encouraging cross-pollination of discourse between students, faculty, administrators, and stakeholders by leveraging interactions in spaces other than the classroom.
  - **Embedding innovation in the university’s planning and management tools**
    - Making innovation a central element of the strategic plan for 2018, the university six-year capital outlay plan, the six-year operating financial plan, long-range college and administrative strategic plans, and departmental goals and objectives.
    - Assuring innovation is a central part of every role definition, plan, review, and compensation action for each member of our community.

**What We Must Do**

- We must fund innovation because it is vital and valuable
- We must practice innovation to create and accept it
- We must share the results of our work within and beyond the university
- We must engage our stakeholders in this effort through “win-win” partnerships
- We must support a culture that expects innovation from the bottom to the top of the organization

**Examples and Illustrations** of potential outcomes of embracing a culture of innovation

The examples below are ideas our subcommittee discussed as we formulated what we’ve outlined above. They are presented not as prescriptions for the university but for reference because they helped ground our discussion in specifics – case studies of innovative ideas and how they might be encouraged, shaped, tested, improved, and implemented though a thoroughly supportive institutional culture.

- Transforming interdisciplinary education through flexible, student-focused curricula to improve recruiting, retention, and competitiveness of graduates.
• Expanding our delivery of the student-centered learning model, to fully replace place the instructional paradigm, which we know greatly accelerates cognitive development.
• Offering an entire range of new interdisciplinary and trans-disciplinary majors, like nanoscience/nanotechnology to systems biology to social economics, while maintaining traditional academic units and professional disciplines.
• Transitioning to an environmentally sustainable campus. Just as we were at one time the first “wired” community in the world (BEV), we can be the first energy-independent and carbon-neutral campus in the world. Besides an enormous research opportunity, it would also be central to our learning and engagement mission.
• Expanding “living laboratories” with external partners (like the Commonwealth Center for Advanced Manufacturing) as the Land Grant of the 21st Century with the potential to energize students, solve complex global problems, tap new funding streams, and expand our presence in the NCR, new areas of the commonwealth, and internationally.
• Creating hubs of action that focus on solving great social challenges, like water in Africa, that erase the distinction and silos of discovery-learning-engagement and bring together a wide-range of social and physical disciplines.