

Semester Project: Innovation at Virginia Tech



Deliverable

Research, critically analyze, and create a public account of innovative activity at Virginia Tech that is valuable to multiple audiences (e.g.: you, the participants of your study, scholars, a broader public, etc.).

Rationale

Collectively, stakeholders in the United States are investing billions of dollars to transform education into an engine of "innovation." Decades in the making, the emphasis on innovation has become dominant in the global Internet age, with directives such as the NSF I-Corps and the White House "Educate to Innovate" campaign seeking to foster innovators from kindergarten to PhD training.

Virginia Tech has become a player in the innovation boom. Programs across the university (with public and private partners) hope to extend VT's mission by cultivating "creativity," "design," and "entrepreneurship" among students, faculty, and administrators. A central initiative is the Institute for Creativity, Arts, and Technology (ICAT), which states that: "The challenges of the 21st century demand creative processes that stem from the realization that design, aesthetic, and technological development have become symbiotic." In other words, it asserts, innovation stems from all fields and is based in interdisciplinary collaboration.

Problem Statement

The challenges of cultivating innovation at VT (and elsewhere) are myriad. What exactly is *innovation*? What problems does it present for an institution with a deep history of training engineers for employment in large corporations and government agencies? What does entrepreneurship mean with respect to academic research and the service mission of *ut prosim*? Can a comprehensive land-grant university located in Appalachia achieve results similar to institutions like Stanford or MIT? Do partners across departments, colleges, and institutes want to collaborate . . . can they?

Methods

This project asks us to take ownership over what we create. Working in small teams, we will determine together the objects of study, expected outcomes, and means of delivery by asking:

- Which people, venues, and initiatives are worthy of study?
- What can be learned by studying them?
- By what means can we convey their significance?
- Who benefits from that knowledge?
- What mediums of delivery offer the greatest audience/intellectual gain/impact?
- What skills do we bring to the project, and which need to be acquired?
- What spaces, tools, etc. do we have access to?
- Can we produce something about which we're passionate and proud?

Seminar activities will provide the tools needed to execute the project and can be altered as needed. My role is to serve as facilitator, sounding board, team-dynamic assistant, and gentle project manager.

Timeline

Milestones

- September 3. Elaboration of the problem with ICAT director Ben Knapp
- September 9. Complete online IRB certification
- September 10. Brainstorming and project selection
- September 17. Teams chosen based on preference and group dynamics
- October 7. Micro-prospectuses due
- October 29. Demos of “prototype” ideas
- December 3. Demos of final concepts
- December 19. Final delivery

Additional Issues

- IRB proposals will need to be submitted at the earliest possible dates to allow for review
- Teams may find it fruitful to cooperate with other teams on “subsystems” of a larger project
- Detailed information about above milestones will be forthcoming
- Nearly everything above is subject to change in the face of brighter ideas