

**Digital Dartmouth**  
**Notes from Council on Libraries Focus Group**  
**January 17, 2012**

**What is the role of technology for a 21<sup>st</sup> century liberal arts education**

- We cannot be behind. Dartmouth doesn't have to be on cutting edge of everything, but we need to engage students with tools they'll be using/need to use when they leave (e.g. Excel).
- Technology offers opportunity to engage learners at a distance; opportunity for people to be more closely connected with Dartmouth than in the past.
- Symbolic computation (we have right now, would like to continue to have); may require more computational power; there will be new trends, e.g. possibility if need for increased capability for organizing distance seminars for research purposes; this may require changes
- Faculty not necessarily in favor of teaching courses online
- Intrigued by question of how technology (rather than being just a helper) could fundamentally change the way we educate and research. How does it change our teaching, and our approach to texts?
- Field of scientifically accurate animations – things happening at a level we cannot visualize (e.g. cell level); many animations available, but they are often wrong or inconsistent; Harvard making a big push to animate biological processes accurately; when you can visualize, you can understand in a different way; allows you to ask next generation of questions about how it works; posing testable hypotheses. It's about learning in the classroom AND learning in the field.
- Fields are becoming more and more quantitative (much of what we're doing lends itself to modeling); if you can model process in code, you can ask questions about accuracy of intellectual model. "Requires an army of collaborative interactions across disciplines."
- Need a way to get undergraduate involved in the move toward quant in the life sciences, how to make it accessible; interdisciplinary collaboration is challenging at many levels
- Question: is there a position for an educational technologist on campus... someone who researches this? Someone who looks at how technology is employable in both research and education. (Answer is no.)
- "We've left the age where one person can do it all."
- A lot of talk about interdisciplinary goals at Dartmouth – everyone wants it, but difficult to make happen on campus, partially due to "bean-counting" (of load, etc.) – there are organizational issues to tackle to realize goals
- Engineering doesn't have sub-departments – would be interesting to hear their perspective on the above...
- In the sciences – depth of knowledge to master is growing exponentially, but also need connections to other fields (this is a challenge)

- Preparing students for what will come is very important, e.g. students use Blackboard on everyday basis; cannot imagine being at Dartmouth without it; provides a record to go back to for studying, etc.; also saves paper
- When students leave, they currently can't take their Blackboard with them; would this be helpful? (Answer: yes)
- New required competency: evaluating the value of content -- this is a liberal arts competency that needs to be reflected in the curriculum; students must learn how to do this vetting themselves
- More classes that span disciplines to help make connections (like 10-classes for statistics; these are statistics classes for each discipline)
- Virtual Dartmouth classroom – is there a place for virtual online tutorial giving students access to chunk-size practical applications of some tools that help them make connections across disciplines? Could possibly be both for students and faculty. Allow people in specific fields to apply technology to their specific goals. (Not suggesting to replace the face-to-face classroom interactions... But this particular application of virtual/online might help augment these interactions.)
- No substitute for Dartmouth to be central to vetting new technology/info; Dartmouth has to have an institutional role in this (e.g. some kind of Google search engine capacity, for smart searching)
- Question: possibility to partner with other institutions to develop these modules mentioned above? Blend strengths in one program with another... (definitely worth exploring)
- On digitizing lectures – what if recorded in advance, and if you did SOMETHING ELSE in the classroom (discuss/work through info, work on problems, ask/answer questions, etc.)?
- Project-based learning
- All of this requires enormous investment (infrastructure, training, etc.)

**If you had access to a pool of funds, what future project(s) would you want to fund to advance Dartmouth's mission through technology?**

- \$\$ for faculty tech purchases (such as previous program where faculty could purchase new computer every 3 years)
- Dean of Faculty has initiated new program related to the above; but it's for tenure track faculty; also need to be concerned about those who are teaching but who don't get tech support (non-tenure track)
- Facility for online seminars between institutions (Skype is used, but has limitations)
- Dartmouth to position itself in ways like MIT has done, individually, or in a consortium (e.g. Ivy League consortium for digital learning?); not a proponent of a lot of asynchronous education, but it does have its place and can help sustain connections (such as with alumni)
- Making Dartmouth's digital resources (perhaps not all, but even select resources) available to alumni (or some model where it can be available for a reasonable fee, or during a transition phase, etc.)
- Can we envision a change in structure for outreach – engaging HS students as a gateway into Dartmouth? Online component to be prepared... Breaking down boundaries – leads more to

concept of lifelong learning; a more contiguous process for people that people can take with them when they leave

- VPN access for students when they graduate
- How much would it actually cost for alumni access to library resources? (some already provided, included in licensing – cost is about \$7K total together; full text info available much smaller in those alumni resources (Note – if federally funded – open access required – a good thing!))
- Problem is that this question assumes that what we’re doing now is right -- not the case. Need to work out kinks on the basics before we think about big new schemes/initiatives; need to get the fundamentals right before we move onto big investments; make sure what we have now is working for everyone.
- A sustainability model that allows us to adjust with marketplace/changes that are and will continue to happen, reallocate resources, etc. – we’re floating on a dangerous level. Sustainability will be an ongoing issue.
- Need to think more creatively about uses of tech/online education; competition (national and global) is increasing.

### **Questions/General Comments/Other Suggestions**

- Suggestion was made for a campaign focused on infrastructure/sustainability (rather than bricks and mortar) – might have traction with certain folks to bring in necessary resources?
- Question: will Digital Dartmouth be intersecting with other S-P working groups? (Yes, some coordination); digital Dartmouth touches all groups, so unique in this respect.
- Question about IT operating budget: 2.3% operating budget spent on IT (check peer avg.?) Dartmouth central IT – 30 people smaller than 10 years ago; check on IT spend 10 years ago as well.
- Acquisitions budget – also low compared to peers (Dartmouth punching above its weight); can’t do this on the cheap (take a look at historical data as well)
- Revamping courses not trivial; needs faculty time/resources; can’t compromise research program, etc.
- Tuck model – has group of people who help with course redesign; also offer release time. Investment up front, but once people are up and running not as resource heavy.
- MHCD program – probably a model that will be more prevalent at Dartmouth (hybrid model)
- “College” at end of our name is a problem with regard to international reputation/name recognition