Engineering Advisory Council—Education Subcommittee summary
Friday, 26 April 2013 Murray Conference

Faculty guests:

John Bennett, ATLAS Director
Scot Douglass, Engineering Honors Program Director
Cory Pavicich, Campus Technology Lead on MOOC/Coursera implementation

1. Global RAP and Andrews:
   - The committee was pleased that the global RAP will open in the fall and discussed next possible RAP themes, such as technology arts and media, environmental engineering, and others.
   - The committee wanted to know what it would take to start creating RAPs more quickly, and whether fund-raising would be appropriate.

2. Fleming Space/Embracing ATLAS:
   - This shared space needs to include ATLAS students so that engineers get broader exposure to the way people in industry think. Could ATLAS help with fundraising?
   - Shared curricula: committee recommends including as many departments and programs as possible, including general engineering.
   - The perceived value to industry: to produce creative innovators, to engage in creative engineering and problem solving, focus on using for improving communication skills through use of pervasive whiteboards, frequent presentations, and project documentation. ATLAS can provide digital awareness and multimedia communication skills.

3. The IT and education/MOOC challenge
   - Discussion of the state of the question: MOOCS and Higher Education, MOOCs and CU-Boulder
   - Goals of engaging with MOOCs: improving visibility and reach of excellent faculty and of CEAS, learning to improve barrier courses through effective IT use.
   - Recommendation of committee: develop a college wide IT strategy and -- if appropriate --lead the campus in the development of MOOCS, flipped classrooms, and IT-enhanced gateway courses. MOOCS should be part of the overall branding strategy for the college, which would enable us to differentiate ourselves from the competition.
   - The discussion of MOOCS led to a broader discussion about our need to emphasize and justify face-to-face educational time because committee members felt that one-on-one contact with faculty is critically important to a rich education. We need to figure out how to maximize face-to-face time in class, create opportunities for small group work, and examine how many lecture halls can become active classrooms.
• The committee also discussed whether online social networks can provide learning community supplements to face-to-face instruction.

4. Presentation by the Leeds/CEAS innovation committee on big picture recommendations for integration of Leeds/CEAS curricula

• Discussion time was spent on trying to figure out why there is not a closer relationship between the business school and the college of engineering. The new four-course business minor offered by Leeds was discussed along with the difficulty for our engineering students to participate in the minor as a result of course section scheduling and availability of free elective credit hours in engineering degree programs. One member recommended renaming, rebranding, and expanding the engineering management program.

• One committee member suggested that since they know members of the business advisory board, they might speak with them to see if there are similar frustrations there.

• The committee encouraged CEAS to continue to pursue a combined BS/MBA degree with the business school.

• The committee encouraged the innovation committee to pursue assembling a task force of faculty across CEAS and Leeds to develop bigger picture integrated curricula.

General observations: it was my sense of this committee wishes to become more actively engaged in pushing for engineering progress on campus.