

Degree Programs of Distinction

Faculty Forum Breakout Session Notes

August 24th, 2015

Two breakout sessions were held, each lasting ~45 minutes and each with 5-10 participants. Attendance was not taken at the breakout sessions.

At the beginning of each breakout session, the session leaders reviewed the committee charge, introduced the idea of a narrative, and then led a discussion of what key parts of the Mines narrative currently were and what participants wished the Mines narrative included. Finally, participants were given a chance to answer Q1 – Q3 at the end of session 1. After talking with participants and realizing that few, if any, had read the committee report the approach was updated for session 2 and Q1 – Q5 were presented to the attendees.

Several high-level themes emerged from the discussion that were not captured in the written meeting notes. These included:

- Having a strong university level narrative was generally supported, however there was no consensus on what that narrative should be.
 - The committee is probably not the one to propose the narrative, however the committee would do well by defining how a narrative could be utilized by programs on campus to become distinctive.
- “Distinctive to whom? As defined by whom?” was a common concern among participants.
 - A strong university narrative could help us define that question with a definitive “defined by the institution”
 - The committee would be wise to address this question head-on as it was a source of much discussion and concern.

Q1 Written Responses: Which comments/observations/recommendations in the committee report do you find compelling and worthy of further consideration? Why?

- “+ Innovative Undergrad Education”
- “+ Narrative of earth energy environment that would link to the future – how does Mines prepare/shape the future
 - Then align program distinctives (sic) w/that narrative”
- “Emphasis on innovative education is important”
- “For Physics, there are some connections to industry, but that doesn’t fit areas that are more basic research.
 - Our field session is successful by giving students hands-on skills”
- “Emphasize innovation and preparation for transformation”
- “Chang (sic) some departments’ names. For example the petroleum can be fossile (sic) energy”
- “Introduce new R&D Centers such as Alternative energies”

- “The narrative must include a sense of problem-solving, adaptation, communication, and service.”

Q2 Written Responses: Which comments/observations/recommendations in the committee report do you not compelling? Why not?

- “Ties to industry
 - but as more than a way to get a highly paid job
 - this (bullet above) is too much of the story now”

Q3 Written Responses: What, if anything, is missing from the committee report? That is, what challenges, opportunities, or other factors should the committee consider as work on these initiatives continues?

- “Programs can become more distinctive by incorporating travel abroad, service to community, and development of communication skills.”
- “Missing: didn’t see words like: hands-on, practical”
- “Field session and senior design and unique programs”

Q4 Written Responses: What, in your view, are the Degree Programs of Distinction on campus currently.

- “1. PE – appreciated by the industry, success in their career. 2. Geology & Geological Eng. – they have a more integrated understanding.”
- “Mining Engineering, Geophysics, Chemical & Biological Eng., Hydrology”
- “Petroleum Engineering, Mining, Physics, Geology/Geophysics”
- “Humanitarian Engineering, Petroleum Engineering”
- “Future Characteristics for Distinction – Socially Responsible, Social Justice, Critical Thinkers”
- “Undergrad Physics – novel, innov.; Petroleum Engineering – tight connections to industry”
- “Recognized as amongst top programs in country: Physics B.S., CBE B.S., PE B.S., Hydrology Grad, Materials Grad”

Q5 Written Responses: Should the committee continue to pursue the Mines narrative approach, and if so what should the narrative be?

- “Mines should move from an ‘Earth, Energy, Environment’ slogan to a mindset that nurtures the whole student, building on his or her academic talents in the fields of engineering and applied science.”
- “Yes; the current one is not very good (too narrow, etc.). No; if the idea is to bring all of the depts. to daylight even if they are not doing great.”
- “Yes – but it is challenging to create one that is unifying in its inspiration but not exclusive/alienating to people with other interests/desires. This requires real leadership to be willing to make a stand for something that may be unpopular to some.”
- “Narrative 2.0 – Care about our students (not a mill), grand challenges save the world mentality, hands-on education, all undergrads do research/internship, real life experience, small classes, mentorship”

- “Yes if it will move us beyond the ‘high salary’ ‘good jobs’ existing one. How about a new narrative that says “Mines graduates are socially responsible engineers who can define + solve the most complex problems.”
- “Good students, ‘compliant’ students, not globally focused, small size, specialized, strong alumni”

Whiteboard Notes Regarding: What is Mines current narrative?

- smaller school
- like to be challenged
- athletics + ach.
- reputation
- 3rd + 4th gen.
- OK to be excited about STEM
- the "not a party school" (I can be serious)

- Characteristics:
- smart
 - hard working
 - designers + hands-on
 - problem solvers (somebody else ID's problems)
 - ⇒ make \$

Narrative

- small size
- focus → specialized
- challenge
- "their intelligence" / smart ppl here.
- No essay; easy to apply
- top school / rigor
- good @ sci/math so... HS course.
+ parents: eng = \$
- "Mines experience"

Characteristics:

- "crunching problem"
↳ solve given problems
- work hard
↳ compliant / disciplined

Whiteboard Notes Regarding: What should Mines narrative be?

Narrative 2.0

transformation
(NRG, exploration, etc.)

- "Leadership" in field
- Link to a tradition
 - ↳ to make a diff.
 - ↳ and run the place.
- creative + identify problems
 - ↳ "taking charge"
- Entrep. ?
- Classroom + = portfolio
- Capability to confront prob. of future
 - ↳ + \$;

Narrative 2.0

- ⇒ Rev. ppl.
- ⇒ EEE < phys. sci.
eng.
- ⇒ "Dartmouth Family"
- ⇒ Risk takers / out-side-box thinkers
- ⇒ innovation + hands-on, etc.
- ⇒ students are part of learning community
 - ↳ w/ ownership.

Earth, NRG, Env.

- + transformative research?
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