THE ROLE OF PEER REVIEW IN THE DEVELOPMENT OF ENGINEERING EDUCATION RESEARCH

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Special Session, ASEE 2014
METHODOLOGICAL BASIS

- Grounded in STS
  - Social construction of knowledge
- PR is a site of knowledge production
- PR is a site of power relations
- Open blackbox to examine micropolitics
WORK IN OTHER FIELDS

• **Science education**
  - 2002 special issue of *Science Education*

• **Higher education**
  - Lamont, *How Professors Think: Inside the Curious World of Academic Judgment*

• **STS**
  - Myers, *Writing Biology: Texts in the Social Construction of Scientific Knowledge*
  - Numerous journal articles

• **Journals advocating more open PR**
  - *Reflective Practice*
  - *Medical Journal of Australia*
WHY STUDY PEER REVIEW?

• Important for how EER develops as a field & community
  • Methods & approaches valued
  • Interdisciplinarity
  • Internationalization
  • Ultimately, insights/knowledge generated

• Challenging meritocracy

• Critical reflection on the status quo

• Critical reflection on assumptions
I approach the riddle of success by analyzing the context of evaluation including which standards define and constrain what we see as excellent . . . . Most of all, I want to open the black box of peer review and make the process of evaluation more transparent, especially for younger academics looking in from the outside. I also want to make the older, established scholars the gatekeepers think hard and think again about the limits of what they are doing, particularly when they define ‘what is exciting’ as ‘what most looks like me (or my work)’.

AN EXAMPLE

• State of gender research in EER
  • Opposing views on what a valuable contribution is
  • Accessibility, depth, extent of prior work

• Implications for:
  • Development of feminist thought & approaches to diversity in engineering education
  • Junior and more periphery scholars
  • Interdisciplinarity
  • Internationalization
SESSION AGENDA

- individual analysis
  - 15 minutes
- Discuss as group
  - 25 minutes
- Report back
  - 20 minutes
- Develop list of issues for engineering education community
  - 15 minutes
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