

## **ABSTRACT: 2013 ELATE Institutional Action Project Poster Symposium**

**Project Title:** Engineering (Lecture) and Something More: A conversation about classroom innovation in the College of Engineering

**Name and Institution:** Keri C. Hornbuckle, Professor of Civil & Environmental Engineering, Associate Dean for Academic Programs, College of Engineering, University of Iowa. Iowa City, Iowa

**Collaborators:** Dean Alec Scranton; Prof. HS Udaykumar (Mechanical Engineering); Prof. Sarah Vigmostad (Biomedical Engineering); Prof. Al Ratner (Mechanical Engineering); Prof. Er-Wei Bai (Electrical and Computer Engineering); and the Engineering Student Services group.

**Background, Challenge or Opportunity:** Engineering (Lecture) and Something More is a series of keynote presentations, luncheons, and demonstrations about innovative teaching strategies the engineering faculty are currently using or developing in lecture courses - with particular emphasis on online materials and activities. The presentations are open to the public and highlight experts on campus and elsewhere. The luncheons include faculty who are interested in small group discussion about their experiences. The demonstrations are offered by faculty and in some cases involve students. The central goal of this project is to improve communications within the College of Engineering (CoE) about the innovative teaching strategies many faculty members are using. The series was announced in spring 2013 and activities are planned for fall 2013.

**Purpose/Objectives:** The purpose of the project is to facilitate a discussion among engineering faculty members about innovative teaching methods that involve online materials, resources, or technologies. The major objective of the project is to support faculty engagement about the future of teaching and learning in the College of Engineering.

**Methods/Approach:** Elements of the project include: 1) a Kick-off event; 2) Keynote presentations from recognized national experts; 3) Faculty luncheons; 4) Demonstrations or classroom visits by CoE faculty and 5) a Celebration at the end of the project. The project is supported by an advisory board of four engineering professors. The project includes a communication plan and an assessment plan. A communication plan is included to examine the effectiveness of several different modes of communicating with and engaging engineering faculty. The project is promoted to faculty using postcard announcements, the intranet web site, announcements at the Engineering Administrative Council and the Engineering Faculty Council.

### **Outcomes and Evaluation:**

The project will include an assessment of faculty satisfaction and engagement as well as an assessment of the communication modes used for promotion. Although engineering students may benefit, teaching effectiveness of the methods will not be assessed. The project success will be evaluated through direct feedback, surveys distributed at the events, and by recording the turnout at events. It is expected that at the end of the project, more faculty members will attempt innovative teaching strategies; a wider variety of innovative strategies will be deployed; the Dean will have a better understanding of which faculty members are leaders in this area and what strategies they are using; the Building Committee will be better positioned to consider how facilities in the new building can support the most effective teaching strategies; and the effectiveness of internal communications for key stakeholders (the Dean, CoE faculty, and CoE staff) will improve.

*Lecture*  
**Engineering and Something More:**  
A conversation about classroom innovation in the College of Engineering

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**ELSM is:**

- Series of **keynote presentations, luncheons, and demonstrations** about innovative teaching strategies currently in use or under development by the faculty in the **College of Engineering** for lecture courses
- Emphasis online materials and activities
- **Presentations** open to the public and highlight experts on campus and elsewhere
- **Luncheons** include faculty interested in small group discussion about their experiences
- **Demonstrations** are offered by faculty in their classrooms

**Goals**

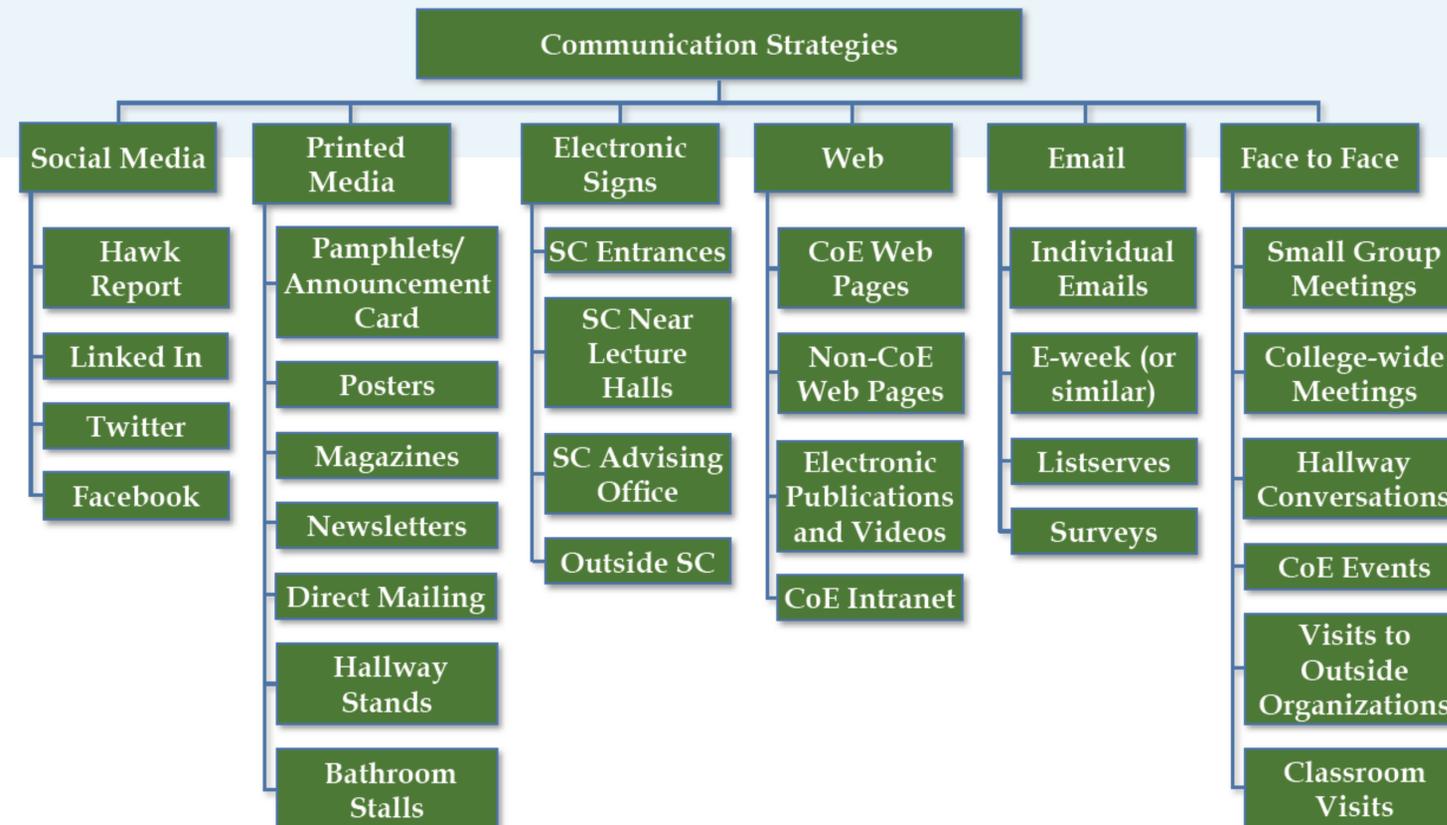
- Central goal of the project:
- Improve communications within the College of Engineering about innovative teaching strategies many faculty members are using
- Corollary goal:
- Determine which internal communications methods are effective in reaching and engaging faculty

**Faculty Engagement Assessment**

- The project includes assessment of faculty satisfaction and engagement in ELSM. Expectations at the end of the project:
- More faculty members will attempt innovative teaching strategies
  - Wider variety of innovative strategies will be deployed
  - Dean will understand which faculty members are innovators and the strategies they are using
  - Building Committee can assess how facilities in the new addition will support the most effective teaching strategies
  - Improvement of the effectiveness of internal communications for key stakeholders, including the Dean, CoE faculty, and CoE staff

**Communication Plan and Internal Communication Methods Assessment**

- The project is part of a broader study of internal communications strategies in the College of Engineering
- Communicate with faculty and students about classroom support, career services, academic advising, tutoring, scholarships, and other academic and developmental opportunities, including ELSM
- Effectiveness of several internal communications methods will be assessed
- The Diagram lists all the communication methods currently used by this group- Not all methods shown will be assessed
- The communication methods used for ELSM include: announcement cards, direct email, hallway conversation, small group meetings, and College-wide meetings



**Mentors & Collaborators**

- Project Mentor: Dean Alec Scranton, College of Engineering
- Advisory Board for the ELSM Series: Professor HS Udaykumar; Professor Sarah Vigmostad; Professor Erwei Bai; Professor Al Ratner
- Collaborators on the Assessment of Internal Communications Methods: Megan Allen, Director of Engineering Tutoring and Retention; Phil Jordan, Director of Engineering Professional Development; Ilsa May, Associate Director of Engineering Professional Development and Admissions; Kelli Delfosse, Director of Engineering Honors Programming and Academic Advisor
- Other contributors include Jean Florman, Director of the Center for Teaching; Dan Reed, Vice President for Research