

#### Mentoring and Facilitation in Entrepreneurship Education: Beliefs and Practices

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#### Overview

- Motivation
- Background
- Methods
- Results
- Discussion









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#### But What Do Mentors Actually Do?

- Mentoring is growing in universities
- Little is known regarding how mentoring works or what is learned by students
- Provide an understanding of the relevant mentoring practices in entrepreneurship education
- To this end, we ask:
  - RQ1: What are salient mentoring practices in entrepreneurship education?
  - RQ2: How do students perceive and respond to these mentoring behaviors and approaches?





- Mentoring in Capstone Design (Pembridge, 2011)
  - Macro-level understanding of mentoring functions and associated practices
- Facilitation practices in Problem-based Learning (PBL) (Hmelo-Silver & Barrows, 2006)
  - Micro-level analysis of specific linguistic practices of mentors





# Methods & Sample

- Case Study of semester-long entrepreneurship course
- Weekly classroom observations → Semi-structured interviews
- A priori coding of field notes and interviews using the two frameworks (Mentoring and PBL facilitation)

Sample	Observed	Interviewed
Student	25	4
External Mentor	6	1
Instructor/Mentor	4	2
Total	35	7





Mentoring Practice	Operational Definition
Coaching	Impart knowledge pertaining to technical engineering and professional skills through a variety of pedagogical approaches.
Pushing for Explanation	Help students clarify both their reasoning and the gaps in their knowledge.
Protection	Prevent student from failing to learn, failing projects, and poor relationships with clients throughout the course.
Rapport	Develop interpersonal relationships that establish an environment in which students feel comfortable approaching the faculty.
Acceptance & Confirmation	Aid in the development of a student's self-efficacy and identity as a practicing engineer.
Role Modeling	Develop attitudes, values, and behaviors of the field through interactions with students.





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# **Directly Supporting Learning**

#### Coaching

DIRATION

- Direct instruction
- Questioning
- Directing students to resources

"You want to be using open ended questions, you don't want to be using 'Did this work?' 'Why does the East respond this way and the West respond this way?' Its the concept of why... As you're looking at your potential value problems you have to find out where does this fit the best?"[Field notes: 3/20/13]

#### Pushing For Explanation

- Why?
- How do you know?
- Explain that to me.

*"I don't want you to feel! I want you to ask!"* [Field notes: 4/17/13]





#### **Classroom Management**

#### Protection

- Monitor team progress
- Ensure accountability
- Be available

"So when I interacted in that scenario, it was very much from a **evaluate, filter, explore**, what's, what portion of what this person is telling me is legitimate and **what portion do I really need to press on**?" [Mentor 1 Interview]



# **Creating Space for Learning**

#### Rapport

- Meaningful interactions both in and out of class
- Getting to know students personally
- Caring for students

"...he's one of those people I could talk to. He was very open to talking about things. And that I think comes from, you know, possibly his younger age, you know, he's engaging, and he tends to be a pretty positive person. But I feel like he's a little bit more real." [Student 2 Interview]

#### Acceptance and Confirmation

- Highlight exceptional work
- Promote a sense of accomplishment/ownership
- Show interest in projects

#### "[The mentor's] excited about the idea and that's helpful, when you're excited about the idea, too, but after, [working on the project development] for four and a half hours and you're exhausted, you're [chuckles], it's good to remember other people are excited about the idea, too." [Student 3 Interview]





# **Role Modeling**

- Modeling professional behaviors
- Expressing personal values
- Providing rationale for decisions
- "...he also shared some of his personal experiences, like when he gets in arguments with his wife, how he has learned through that interaction how to kind of argue better with better outcomes, and he was sharing that with me, so it was nice that he had that personal experience." [Student 2 Interview]



#### Discussion

- Better understanding of:
  - The range of responsibilities of mentors (RQ1)
  - What students perceive to be important (RQ2)
- Practices are separate, yet occur simultaneously
- Shedding light on practices that mentors may be less aware of in these environments
- Formal learning opportunities vs. Informal relationship building





#### Limitations

• First time this class had been offered

• Primarily engineering students

• 2 out of 8 students teams were represented in the interviews





#### Future Work

- Develop of a more contextualized model of mentoring in entrepreneurship education
- Understand of the interactions between mentoring practices, student perceptions, student learning, and project success
- Mentor training and professional development





#### Questions?

