



SMITH COLLEGE



Job Shadowing

*New Perspectives,
New Ideas, New Interest*

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Context

- Engineering at Smith
 - Liberal arts college
 - B.S. Engineering Science
 - 25-35 majors/year
- Motivation/Objectives
 - Provide students window into engineering workplace
 - Increase awareness about opportunities for women in engineering



Overview



Program
Logistics

Results/
Discussion

Suggestions

Program
Logistics

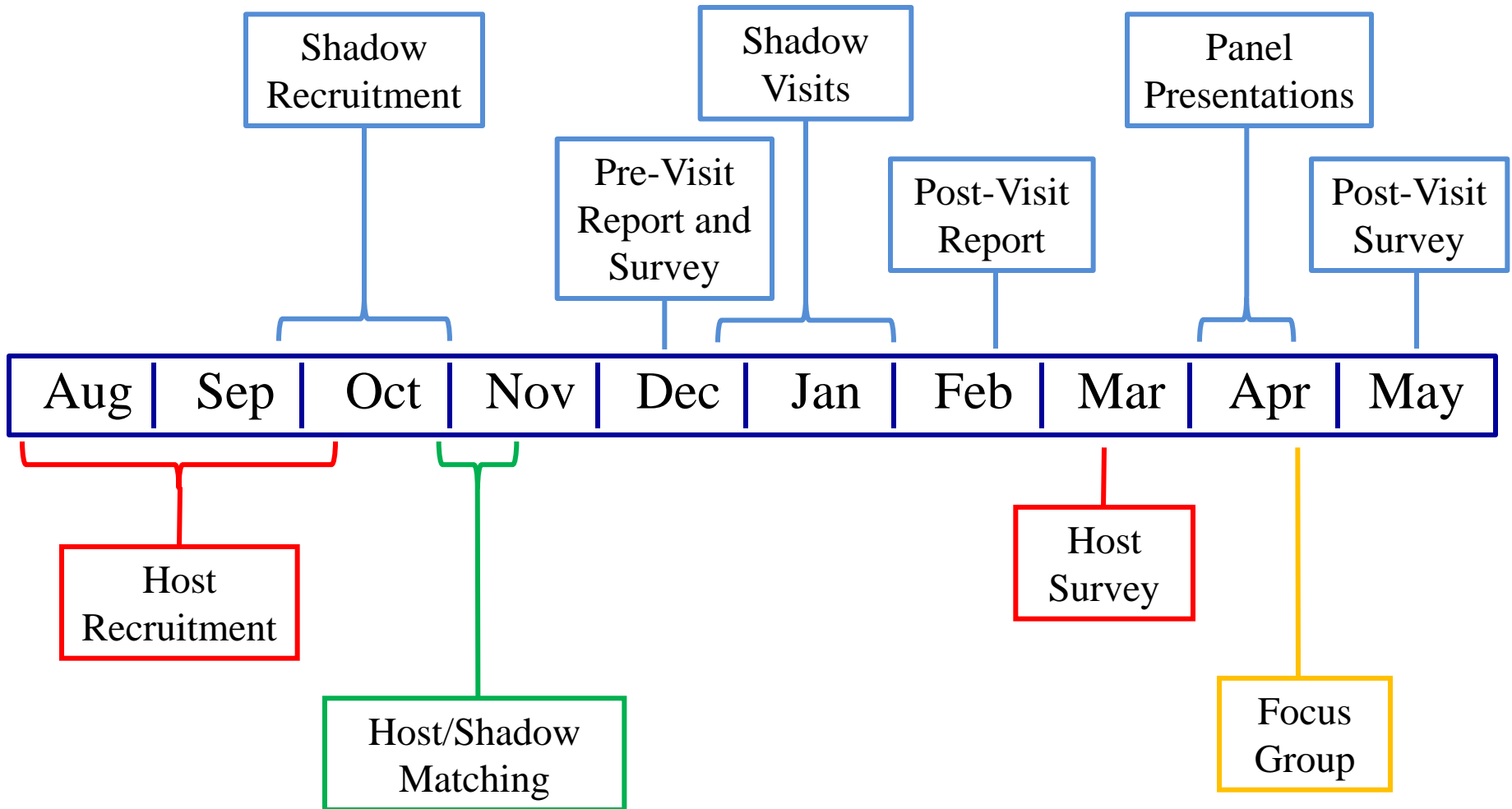
Results/
Discussion

Suggestions

Logistics

- Recruited potential workplace hosts and engineering students
- Matched 14 selected students (across class years) with hosts based on location & interests
- Ensured students coordinated and completed one-day shadow visit with assigned host
- Implemented shadow assignments/assessments
- Provided student shadows a small stipend

Timeline



Shadow Hosts and Locations





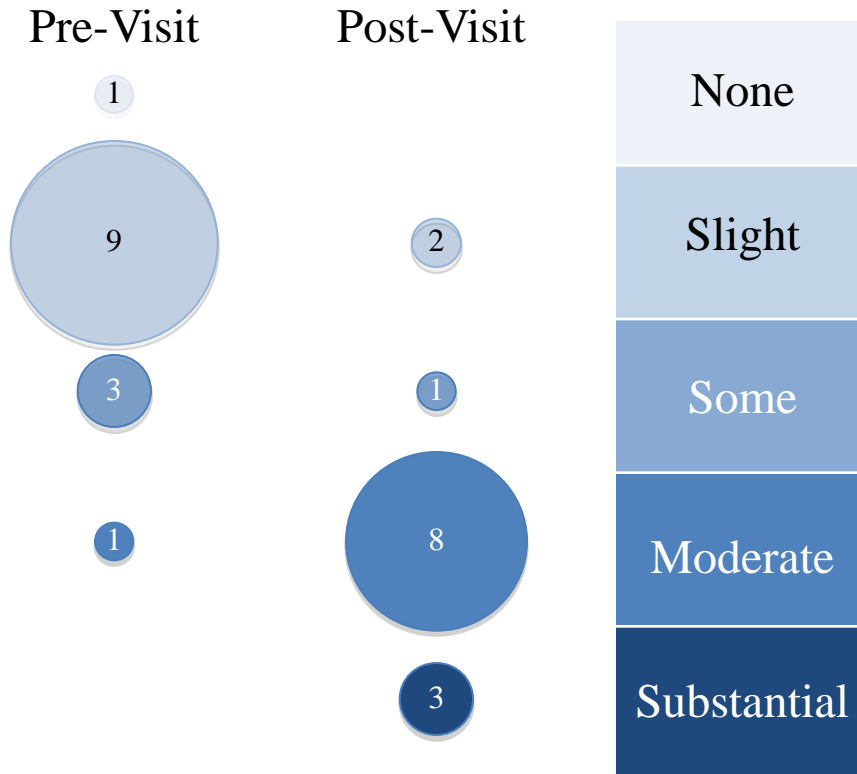
Program
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Results/
Discussion

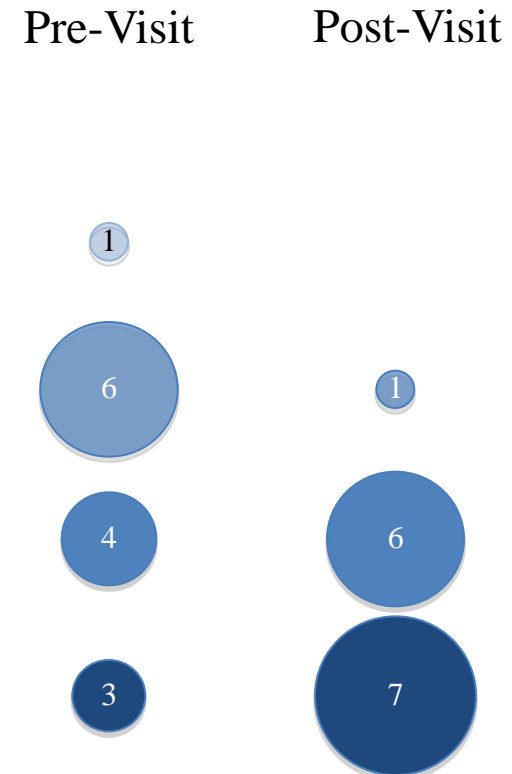
Suggestions

Knowledge + Confidence

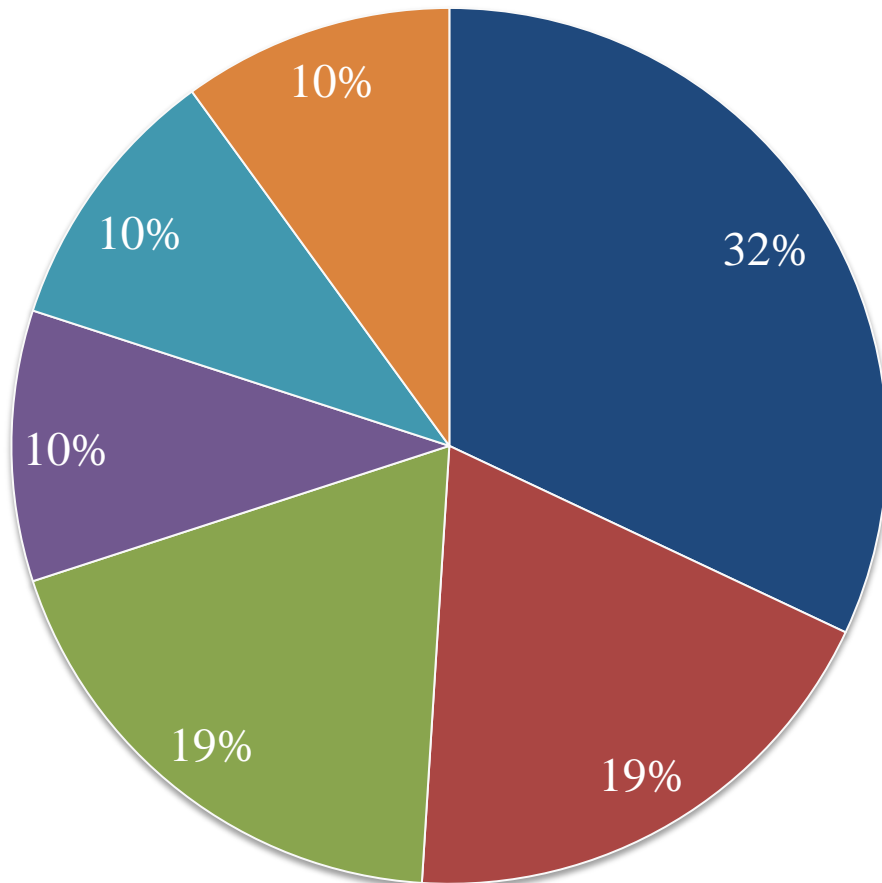
How much knowledge do you have about a day in the life of an engineer?
(# in circle = # of responses)



How much confidence do you have in your own potential for success in engineering?
(# in circle = # of responses)



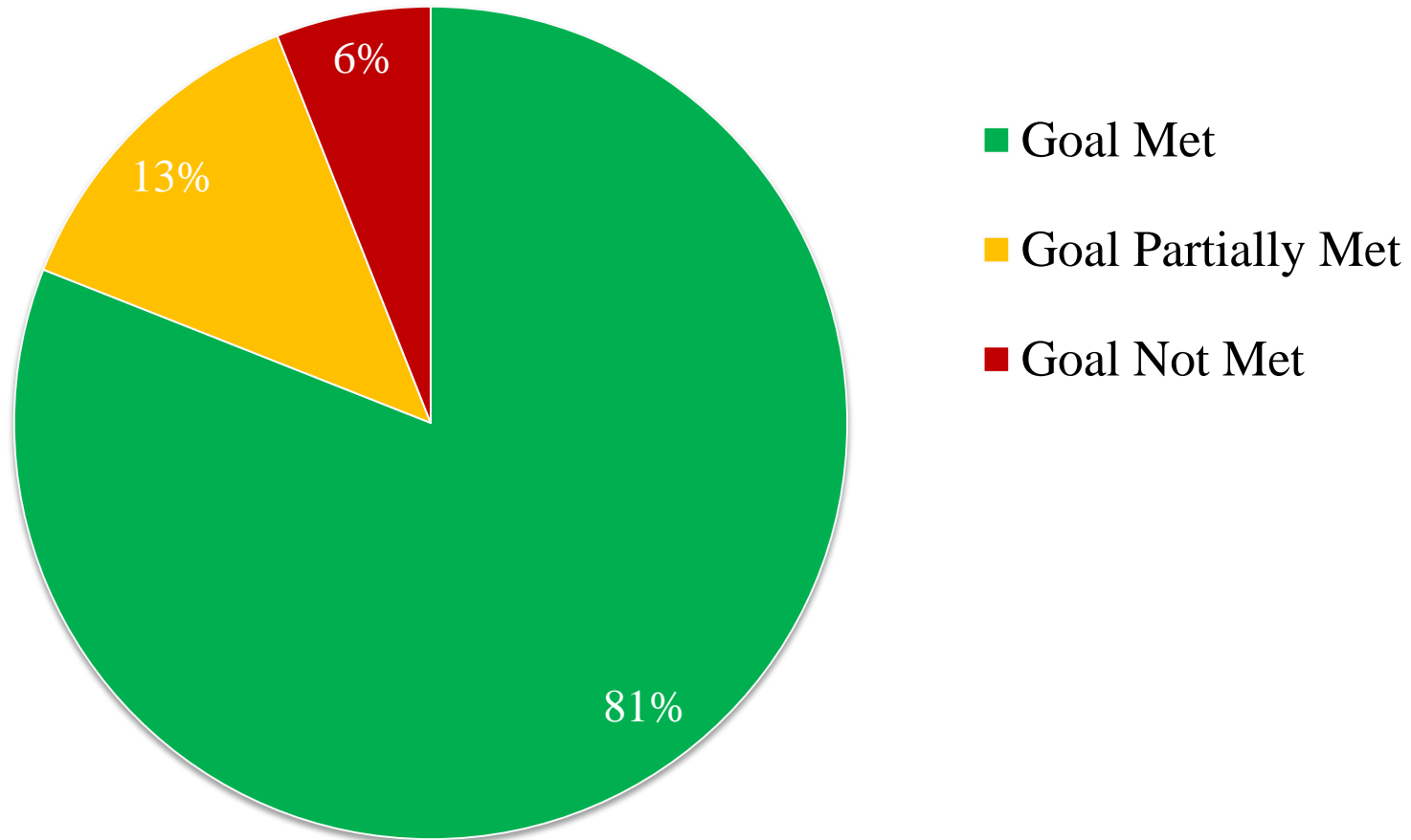
Shadow Goals (Pre-Visit)



- Experiencing "A Day in the Life"
- Tasks/Responsibilities
- Future Plans
- Gender Issues
- Networking/Speaking with Engineers
- Learning More about the Field of Engineering

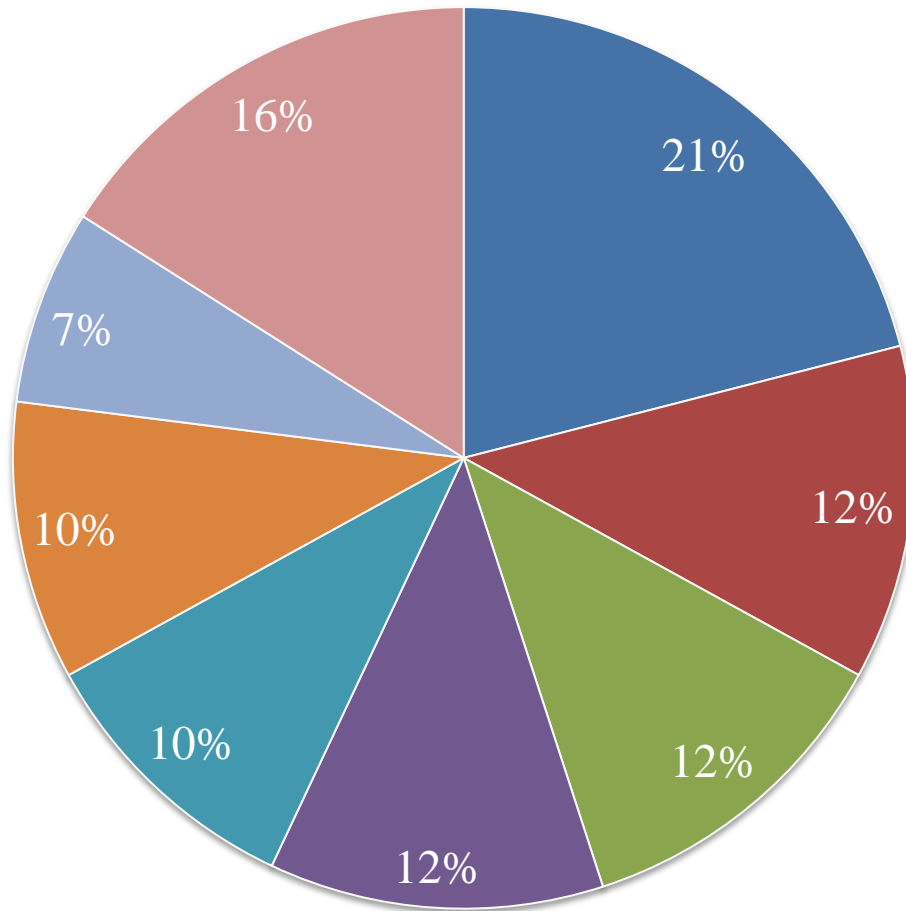
n=38

Shadow Goal Achievement



n=32

Shadow Takeaways



- Advice Related to Engineering and the Workplace
- Communication
- Flexibility of Path
- Life Advice
- Self Confidence
- What I Am Looking for in a Career
- Collaboration
- Miscellaneous

n=42

Shadow Observations

- Tasks/Responsibilities
- Communication/
Collaboration
- Work Schedule/Balance
- Work Environment
- Gender Issues
- Self-Confidence
- Future Engineering Plans

Shadow Observations

- Tasks/Responsibilities
- **Communication/
Collaboration**
- Work Schedule/Balance
- Work Environment
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- Self-Confidence
- Future Engineering Plans

“I found that the skill that was most used was communication. My host had to approach communicating with different people in different ways...”

“I learned that teamwork is very important in engineering.”

“During my shadow visit what shocked me the most was the amount of collaboration.”

Shadow Observations

- Tasks/Responsibilities
- Communication/
Collaboration
- Work Schedule/Balance
- **Work Environment**
- Gender Issues
- Self-Confidence
- Future Engineering Plans

“Engineers do not have monotonous jobs ... each worker had their own space and a specific task to accomplish, but they were responsible for managing their own time.”

“The shop floor was very clean and organized...they explained this was very purposeful, every worker has his or her own station, and every tool has a place.”

“It felt like a jungle...there were computers, servers, boxes, and odd electrical bits strung everywhere...”

Shadow Observations

- Tasks/Responsibilities
- Communication/Collaboration
- Work Schedule/Balance
- Work Environment
- Gender Issues
- **Self-Confidence**
- Future Engineering Plans

“I have always had this nasty little fear that in the real world I won’t be good... I’ve got more evidence for myself that I am good at engineering.”

“It definitely made the idea of becoming an engineer seem more possible to me. Interacting with working engineers showed me that I do have the patience and skills needed to succeed in the field, I just need to learn more.”

“I can see myself working as an engineer. The engineers that I met during my shadow were all so welcoming and knowledgeable and they really encouraged me to try out engineering.”

Shadow Observations

- Tasks/Responsibilities
- Communication/
Collaboration
- Work Schedule/Balance
- Work Environment
- Gender Issues
- Self-Confidence
- Future Engineering Plans

“I am even more excited to be an engineering major.”

“The shadow experience helped me to see exactly how I can achieve my goals.”

“My experience made me more curious and interested in other areas spoken about in the shadow presentations.”

Panelist Comments

Video Clip
from one of the
Shadow Panel Presentations
April 2012

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Suggestions

Suggestions: Matching

- Assemble a database of potential hosts
- Select shadow hosts in first 10 years of career
- Emphasize to hosts the intent for shadows to watch them work
- Match students with a single host for an entire day
- Create shadow-host matches based on shadows' interests and hosts' field

Suggestions: Preparation

- Assign shadows to write a pre-visit report to learn background info on host company
- Encourage shadows to document goals and objectives before the visit
- Provide shadows with guidelines on office etiquette
- Provide hosts with expectations of shadow visits
- Allow shadows and hosts to coordinate shadow visit logistics between themselves

Suggestions: Implementation

- Provide transportation for shadows or provide a stipend to cover travel costs
- Require shadows to follow up with hosts through thank-you notes (at a minimum)
- Encourage shadows to record their reflections, while still fresh, after the visit
- Schedule post-visit panel presentations to add value and share shadow experiences

Benefits

For Shadows:

- Experience a day in the life of an engineer
- See how the technical skills and knowledge from class are applied by engineers
- Network with practicing engineers

“Beforehand, I imagined the engineering workplace to be one way, and now I realize there are so many different options.”

For Hosts:

- Connect with and support a future woman engineer
- Share experiences and knowledge about engineering work with shadow

“[Hosting] was incredibly rewarding.”

Contact Us!

For more information, for shadow program materials, or to become a potential host or sponsor:

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