"Student recruiting, advising, and mentoring" ICSE New Faculty Symposium 2019

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(Likely) Invariants

- Student are impact
- Exceptional students are rare
 - Recruiting/advising takes work
 - Few students will be as strong as you were
- Mentoring model must tolerate variance
 - No two students are the same
 - No two mentor-mentee relationships are the same
- Seeing your students grow and succeed is the best part of the job

Recruiting

How I am going to recruit?

Pick Candidates from Grad Application Pool Join Grad Committee Advertise & follow-up

Teach class

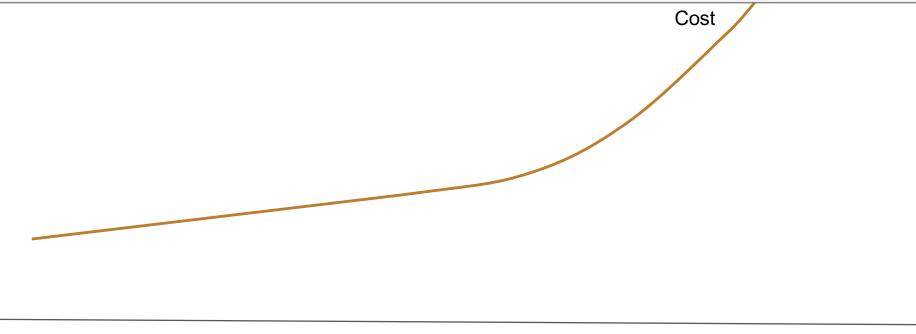
Form Group

Targeted Recruiting

Build Pipeline

Effort

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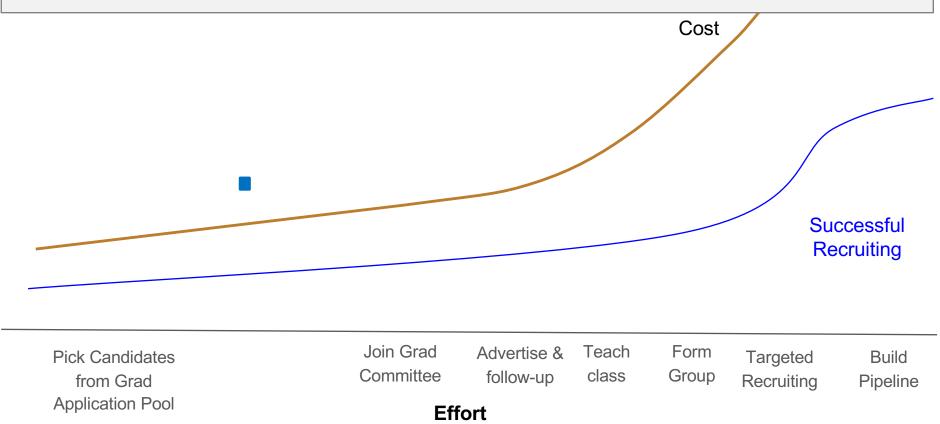
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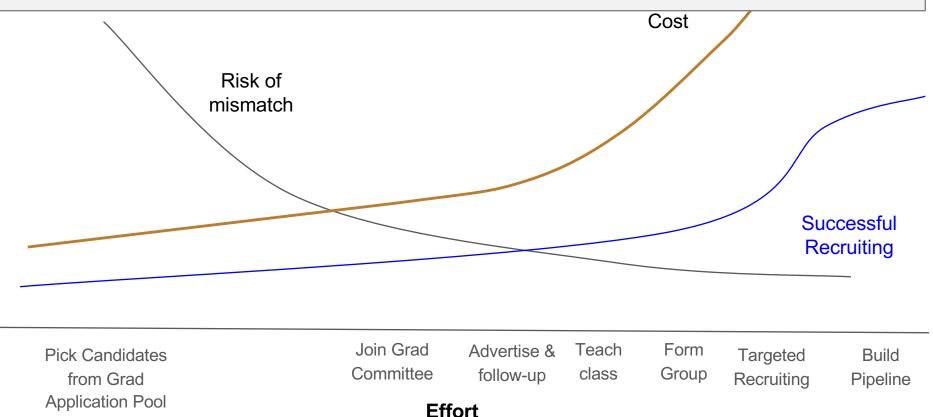
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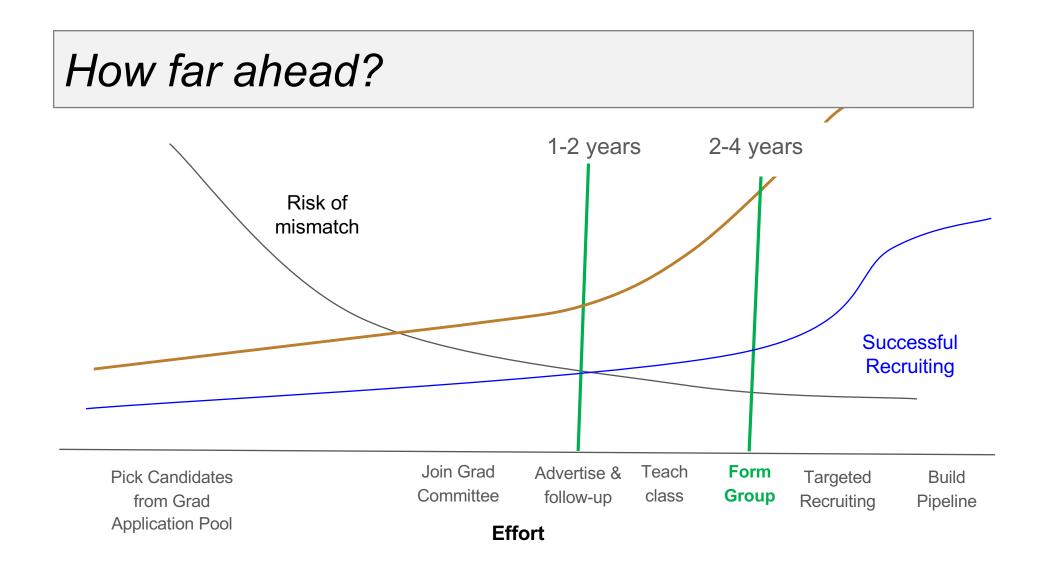
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How I am going to recruit cost-effectively?



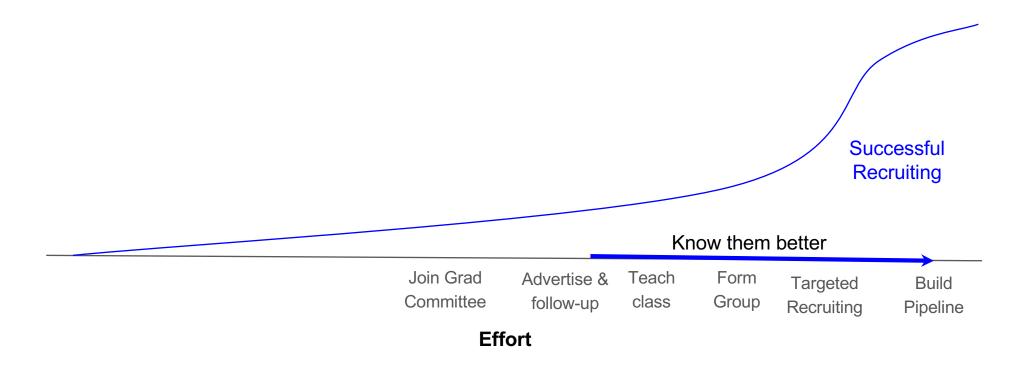
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How do I check if a student is a good fit?

Get to know them, and get them to know you



How do I identify good students?

- Get to know them, and get them to know you
- Define what you would like to see
 - Ambitious, Aligned expectations, Show intellectual depth
- Process
 - Give them homework
 - How well did they do, how far did they go
 - Inquire about previous experience based on CV
 - Can they explain high level concepts and technical elements
 - Listen to their questions
 - Are they unique? Deep? Aligned to your interest and work?

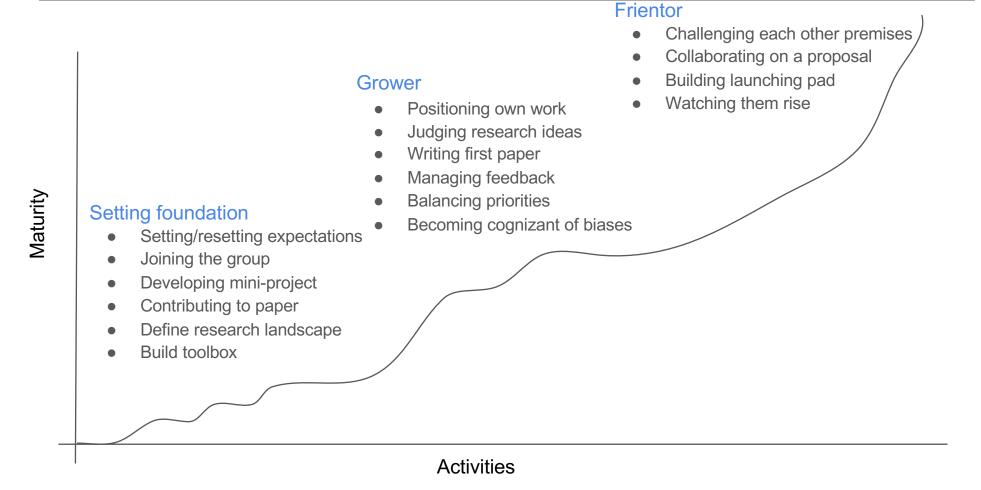
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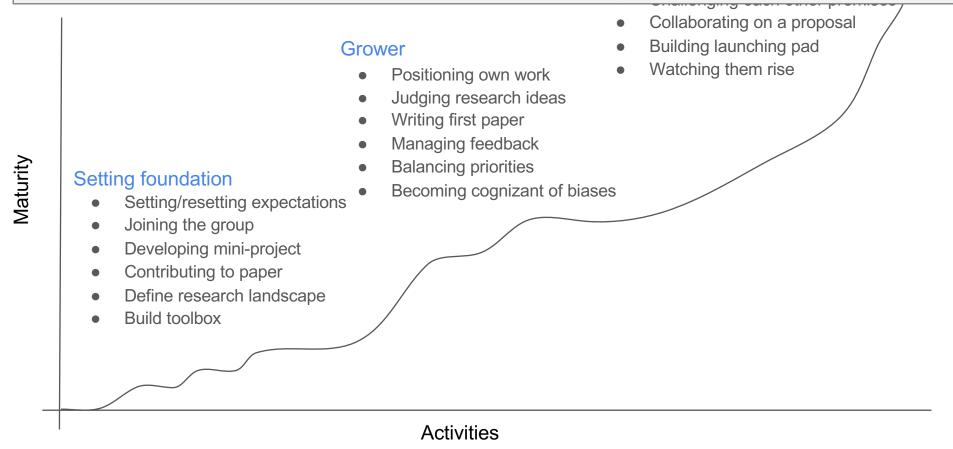
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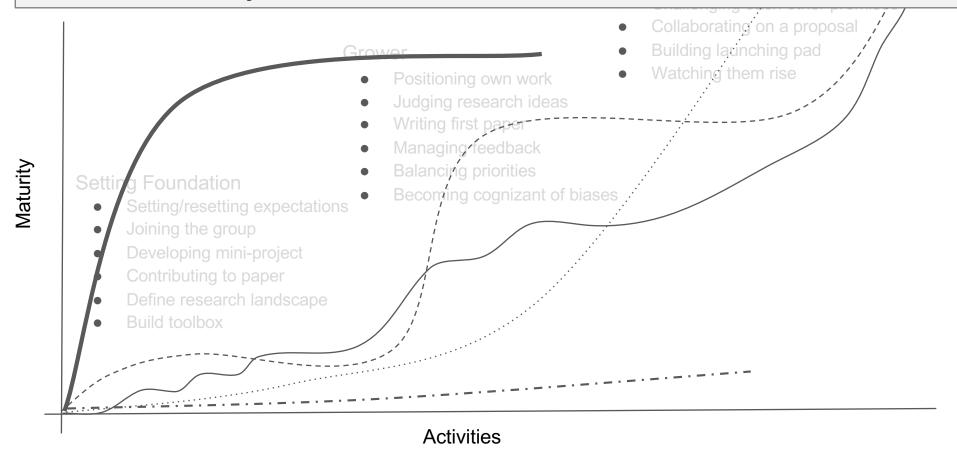
Mentoring

What mentoring activities should I perform?

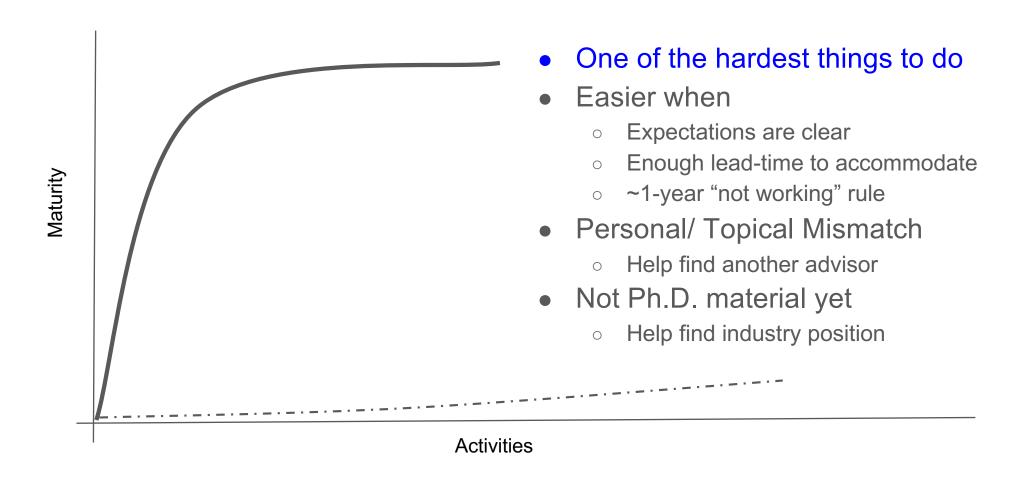




Different mentoring for different students, or a consistent style?



How to break-up when is not working?





Advising Practices

- Continuous engagement
 - 1-1 weekly meetings
 - Stop by to converse, support, inquire
 - Synchronize expectations

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 - Other professors
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 - Going to conferences

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 - Progress towards goals
 - Make opportunities available
 - Helping them to balance it all

How to maintain continuance of research after students' graduation?

- Continuous engagement
 - 1-1 weekly meetings
 - Stop by to converse, support, inquire
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Organizational Memory

- Multiple development vehicles
 - Other professors
 - Targeted summer internships
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Or maybe you do not, or you team up

How to navigate a [small|large] of [age|cultural|...] gap?

- Continuous engagement
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How to navigate a [small|large] of [age|cultural|...] gap?

- Continuous engagement
 Multiple development vehicles
 - 1-1 weekly meetings Other professors
 - Be mindful of the gap I am so biased!
 - Understand where
 - You can provide value: knowing how to conduct research
 - You can earn value: experiences, expertise, context
 - Peer support

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Helping them to balance it all

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I've been at the job for N years and my most mature PhD student is M years from defending. Can I still get tenure? Can I get tenured with only supervising students of X kind?

Context dependent

- Are there recently tenured profs with that profile at your institution?
- What feedback have you received from peers and the chair?

Student = Impact = Satisfaction