

Using Deliberate Innovation Methodologies to Enable Graduate Student Success

AAPT Summer Meeting 2020

Contributed Talk, ID: 10351

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Advisor/Advisee: Educational Challenge

- The Graduate Advisor/Advisee relationship can negatively impact research progress
- Students might leave the program as a result of the negative relationship
- It is not good for the Advisor or Advisee if there isn't effective communication

Problems with Educational Reforms

- There are problems with how changes are effectively implemented
- There are great research-based methods and suggested best practices, but they fail to take root, grow, thrive, and flourish.

 What is the difference between solutions that take root, and ones that don't?



Educational Reforms that Thrive

- Solutions that stop working when resources run out are not sustainable
- We seek to have create solutions that are self-sustaining
- Example: Individual Development Plan (IDP)
- This shows up in many areas of Academia, including Educational Research



Indifference and Non-indifference

- Not trying to understand what we're not noticing from the beginning
- This often leads to indifference to the reform
- The key is trying to understand non-indifference from the beginning of the project
- We're looking for situations where the people we care about can't not act

WHO are we interested in?

- Ph.D. students and advisors in STEM
- Students still within their first two years of research
- Currently looking at Georgia Tech, but think this is more universally applicable to other colleges and institutions
- Seeking to confirm or disconfirm these are the right people



WHY are we interested in them?

- Once the problem becomes obvious, often too late to fix the problem
- We think focusing on the first two years establishes the positive/negative patterns in the relationship
- This might be the place we can focus on being of service to Advisors/Advisees



Method of Meetings (1)

- Contact individuals we care about
- Set up Meeting, via phone call or video chat
- Pre-Meeting
 - Write down what we think will happen, and specific behaviors that might show up.
 - Create a carefully worded and deliberate prompt or prompts

Method of Meetings (2)

During the meeting

- Keep in mind our strong idea, weakly held that we're looking to disprove
- Probe carefully into minute details of relevant specific situations

Post Meeting

- Write down what we got right, wrong, and what surprised us
- Determine how to proceed with the next person



What could be going on?

In general:

 Advisors and Advisees have misaligned expectations in their relationship, and they don't talk about it.

An example:

- 6th year graduate student says he knows what his advisor expects him to present in research meetings
- He reveals that he "knows" this through having watched his advisors facial expressions during meetings

Next Steps

- To see the situations Advisors/Advisees find themselves in more clearly, we're having a large number of these meetings
- We're looking for repeatable phenomena in which these cross-purposes show up
- At the next meeting, I hope to have a more fleshed out idea

Thanks for watching!

See also:

Contact:

PERC Poster Session: No. 2.H1

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