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# Mentoring: Exploring What Works Among Underrepresented Students

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**BUFFALO STATE**  
The State University of New York

*knowinnovation*

# Objectives

1. To introduce the concept of Appreciative Inquiry and be able to describe how AI can be of value to you, and your institutions
2. To disseminate the results of an NSF study to explore what worked in mentoring underrepresented students
3. To discuss future efforts to strengthen and sustain the application of what worked and apply to participants' respective context

# A True Story

## American Airlines

# Appreciative Inquiry

*Appreciative Inquiry is the study of what works well*

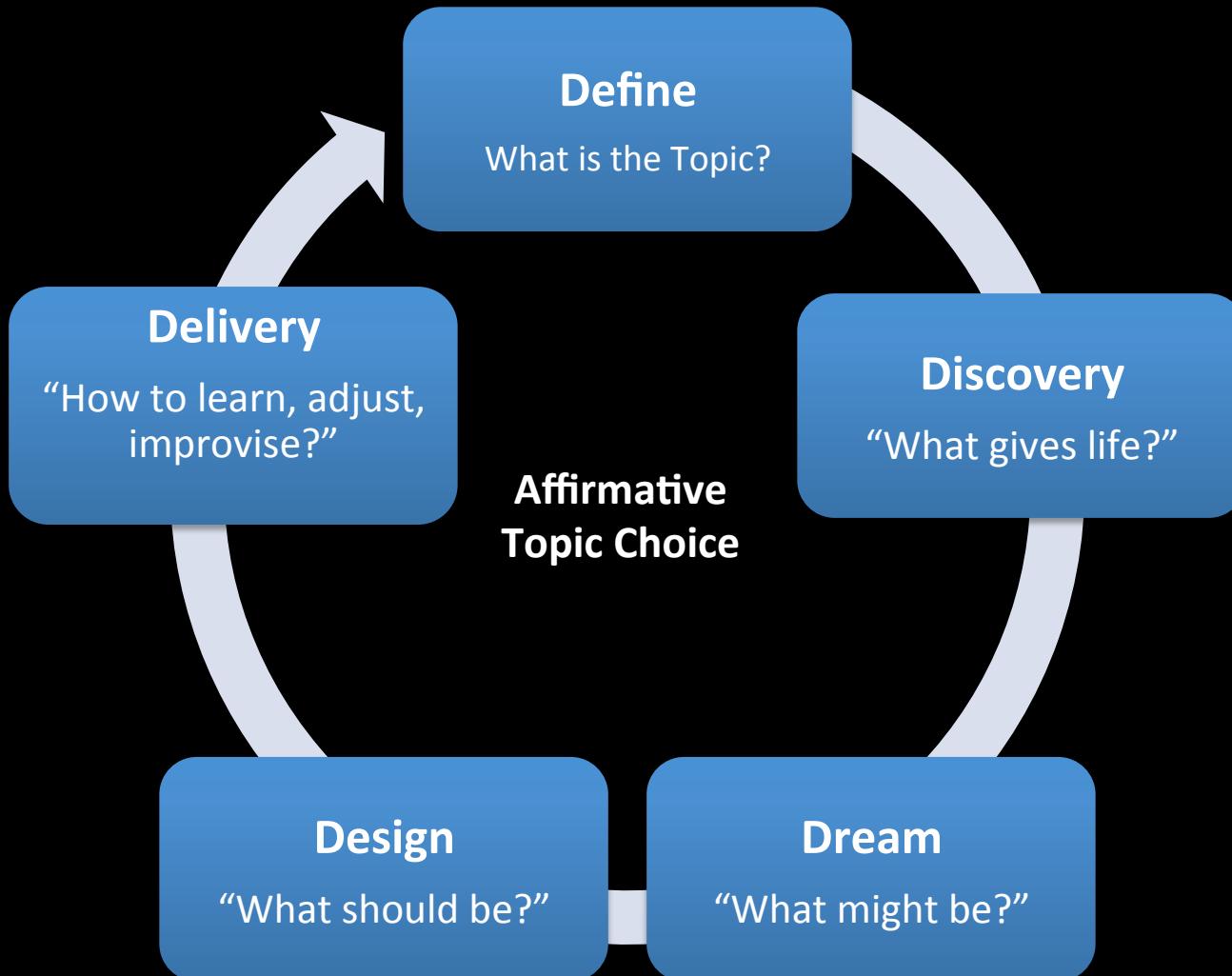
- ❖ Focuses organizations on their most positive qualities
- ❖ Leverages those qualities to enhance the organization

Cooperrider, D. L., Whitney, D., & Stavros, J. (2005). Appreciative Inquiry Handbook. Brunswick, OH: Crown Custom Publishing

# Appreciative Inquiry Assumptions

1. In every society, organization, or group, something works
2. What we focus on becomes our reality (e.g., See, Do , Get)
3. The act of asking questions of an organization or group influences this group in some way
4. People have more confidence and comfort to journey to the future (The unknown) when they carry forward parts of the past (The known)
5. If we carry parts of the past forward, they should be what is best about the past
6. The language we use creates our reality

# Appreciative Inquiry: The 5-D Cycle



Cooperrider, D. L., Whitney, D., & Stavros, J. (2005). *Appreciative Inquiry Handbook*. Brunswick, OH: Crown Custom Publishing

# Deficit Problems & Affirmative Topics

DEFINE

## Deficit Issues

- ❖ Mid-mgmt. turnover
- ❖ Incomplete tasks
- ❖ Low morale
- ❖ Turfism/silos
- ❖ Delayed flights
- ❖ Customer complaints
- ❖ Lack of training
- ❖ Missed commitments

## Asset-based Topics

- ❖ Extraordinary service w buzz

Cooperrider, D. L., Whitney, D., & Stavros, J. (2005). Appreciative Inquiry Handbook. Brunswick, OH: Crown Custom Publishing

# 4 Foundational Questions

Q1: Peak experience or high point?

Q2: Things valued most about...

- Yourself?
- The nature of your work?
- Your organization?

Q3: What are the core factors that give “life” to organizing (or to your organization)?

Q4: What are the three wishes to heighten vitality and health?

# DISCOVERY

Describe a time that made you most proud--a high point, when you mentored someone successfully to do something challenging.

What were the most memorable parts of the mentoring experience, including challenges?

Reflect on: “root causes of success” What were they?

What were your best mentoring qualities that helped you succeed?

Describe the steps to your mentoring process that led to success.

What tools and specific techniques did you use?

What environment did you foster that led to the high points?

As a result of your positive influence, your student evolved into a \_\_\_\_\_

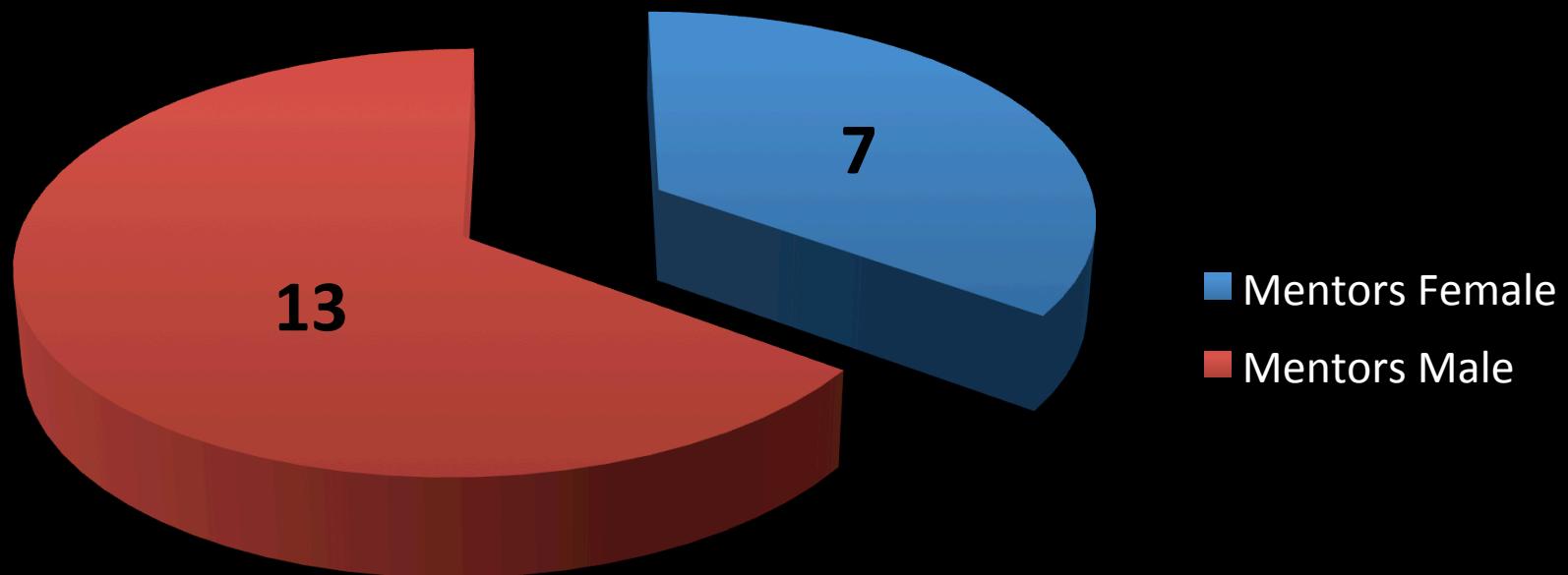
Mentoring is one approach to broadening participation. Over and above mentoring, what else have you found that worked to broaden participation?

Imagine you had a magic wand and could have three wishes granted to improve mentoring. What would they be?

What tips would you give to advisers, mentors or any other person who serve in a similar role so that they can more effectively approach mentoring?

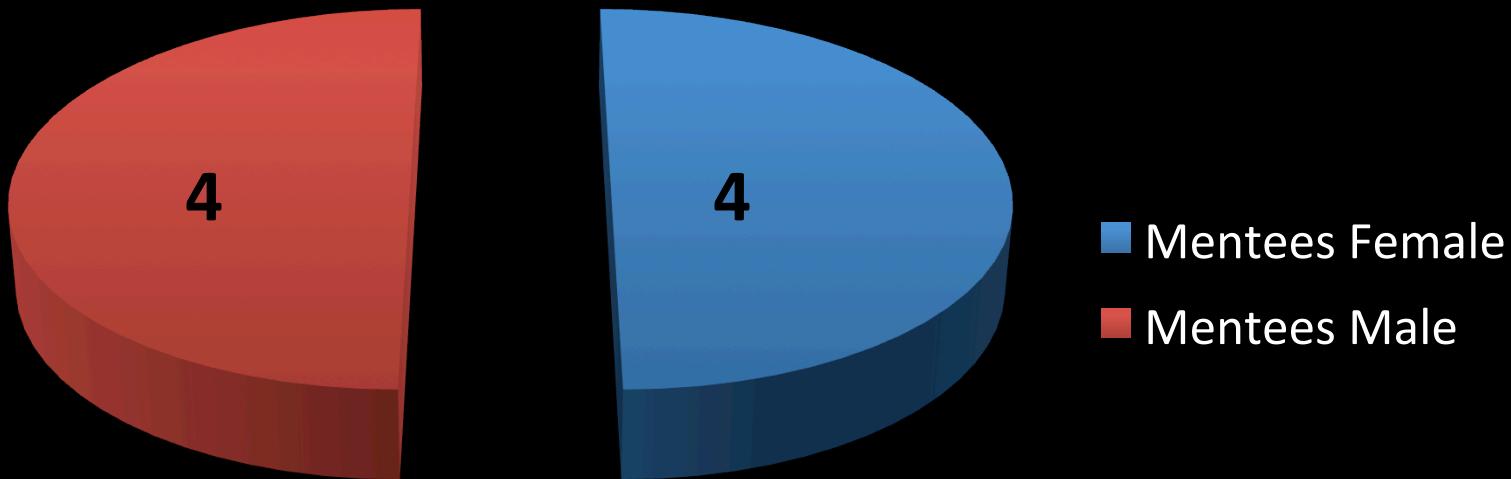
# Demographics

## Gender: Mentors



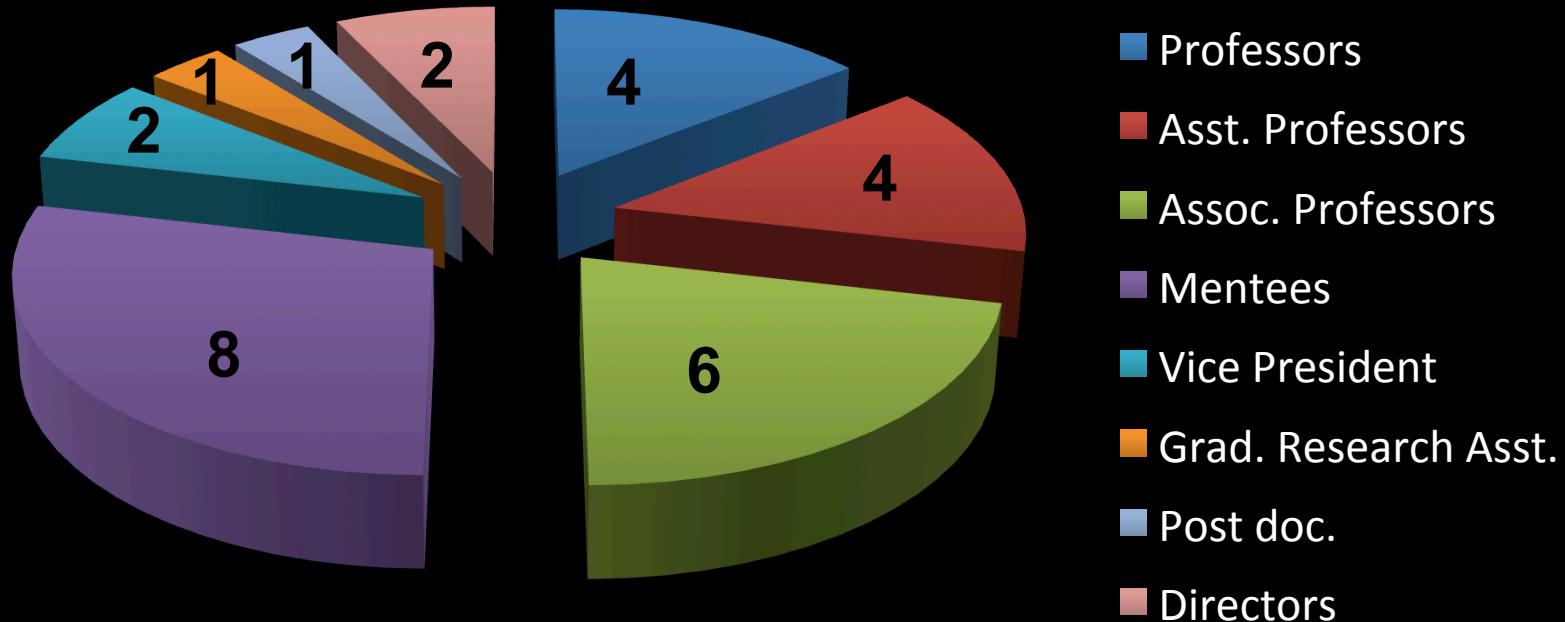
# Demographics

## Gender: Mentees



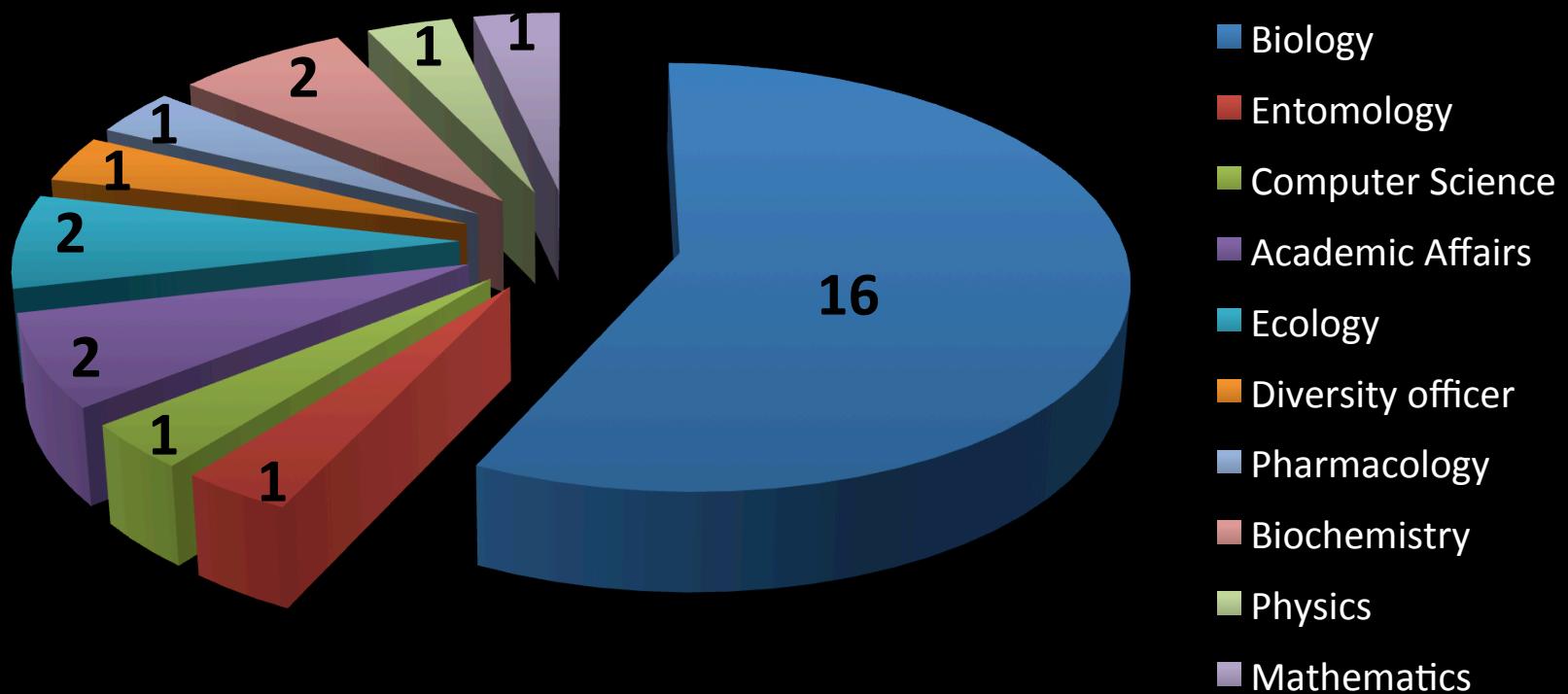
# Demographics

Title

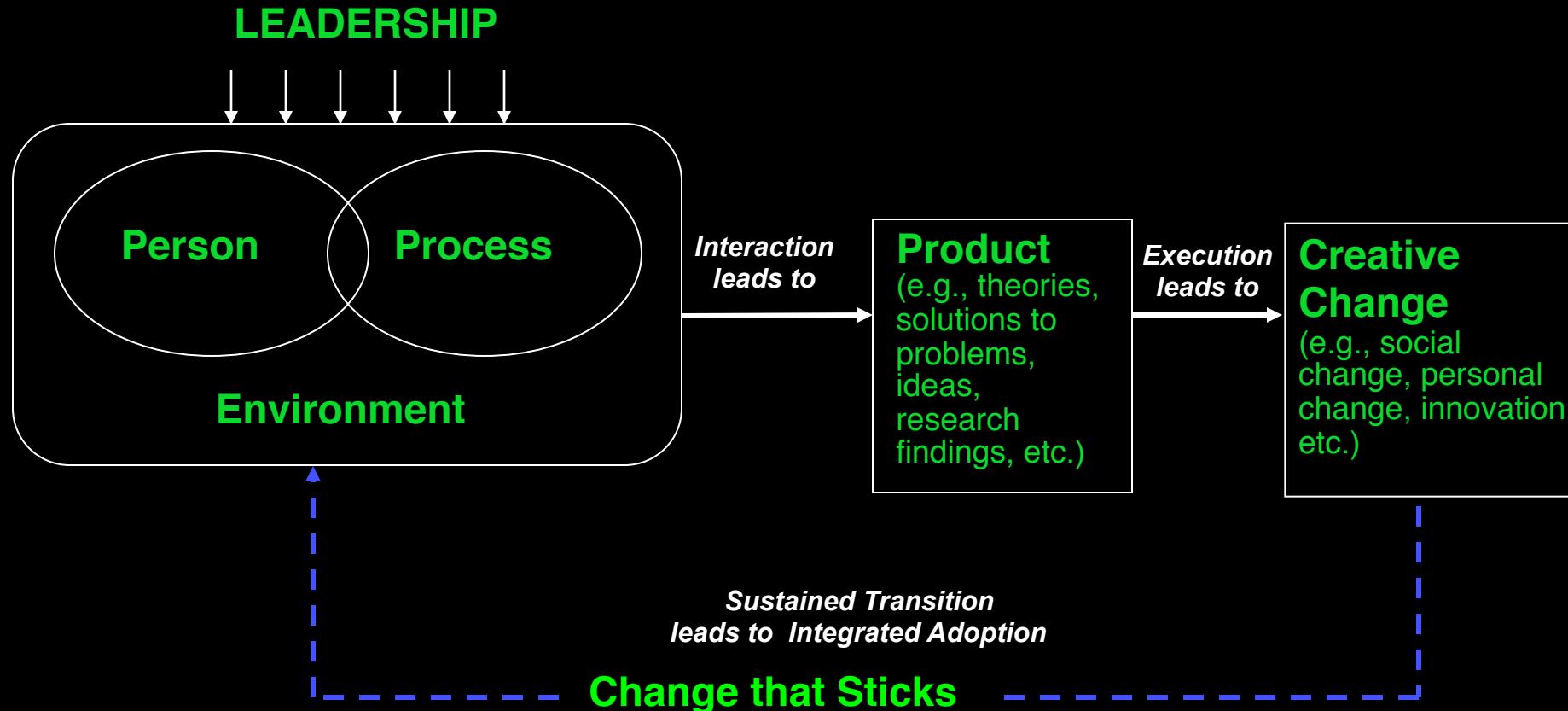


# Demographics

## Area



# AI System View



Adapted from Puccio, Murdock, & Mance, 2006

# DISCOVERY

Describe a time that made you most proud--a high point, when you mentored someone successfully to do something challenging.

What were the most memorable parts of the mentoring experience, including challenges?

Reflect on: “root causes of success” What were they?

What were your best mentoring qualities that helped you succeed? [PERSON]

Describe the steps to your mentoring process that led to success. [PROCESS]

What tools and specific techniques did you use?

What environment did you foster that led to the high points? [ENVIRONMENT]

As a result of your positive influence, your student evolved into a \_\_\_\_\_ [OUTCOME]

Mentoring is one approach to broadening participation. Over and above mentoring, what else have you found that worked to broaden participation?

Imagine you had a magic wand and could have three wishes granted to improve mentoring. What would they be?

What tips would you give to advisers, mentors or any other person who serve in a similar role so that they can more effectively approach mentoring?

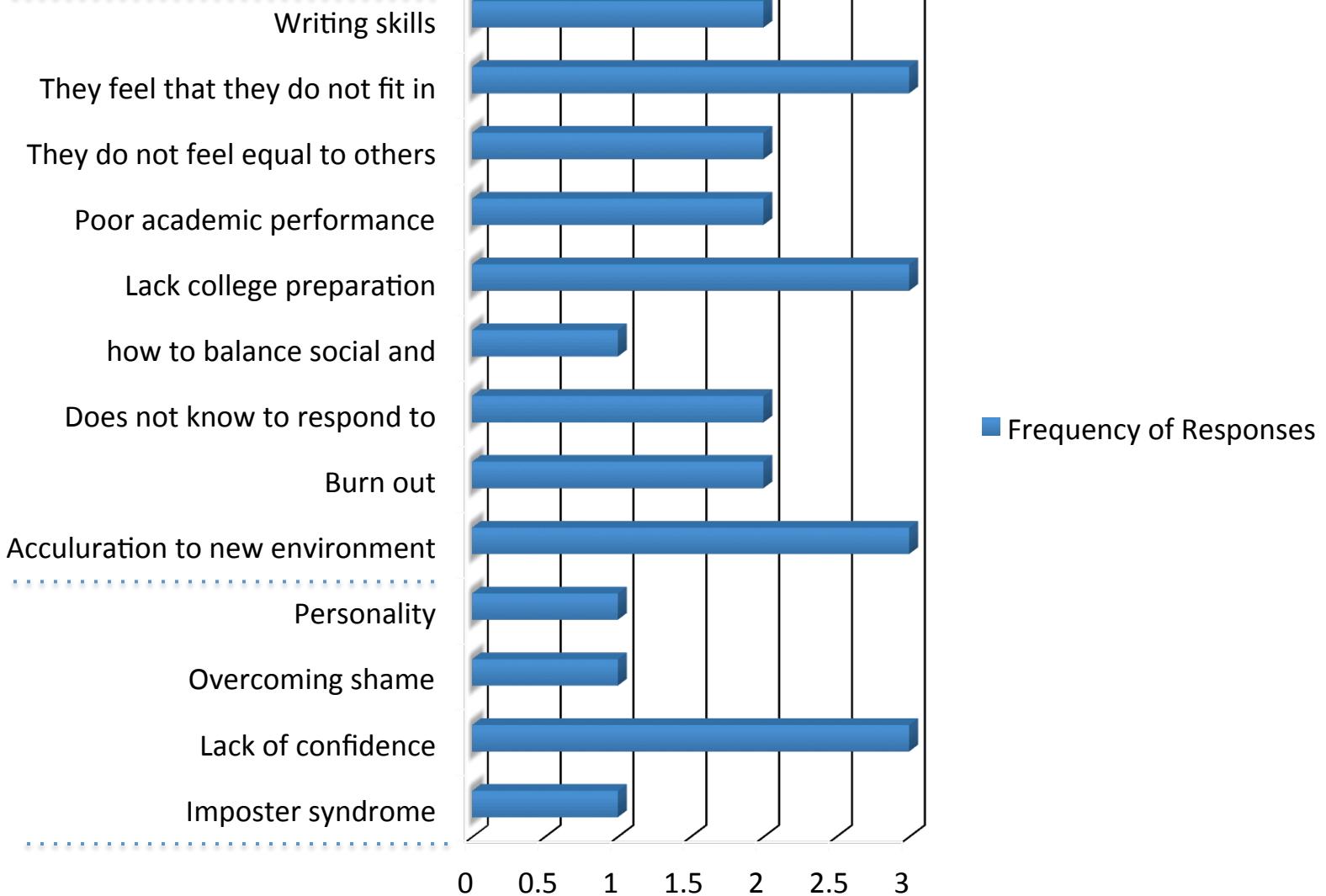
# Findings

# Challenges Faced by Mentees



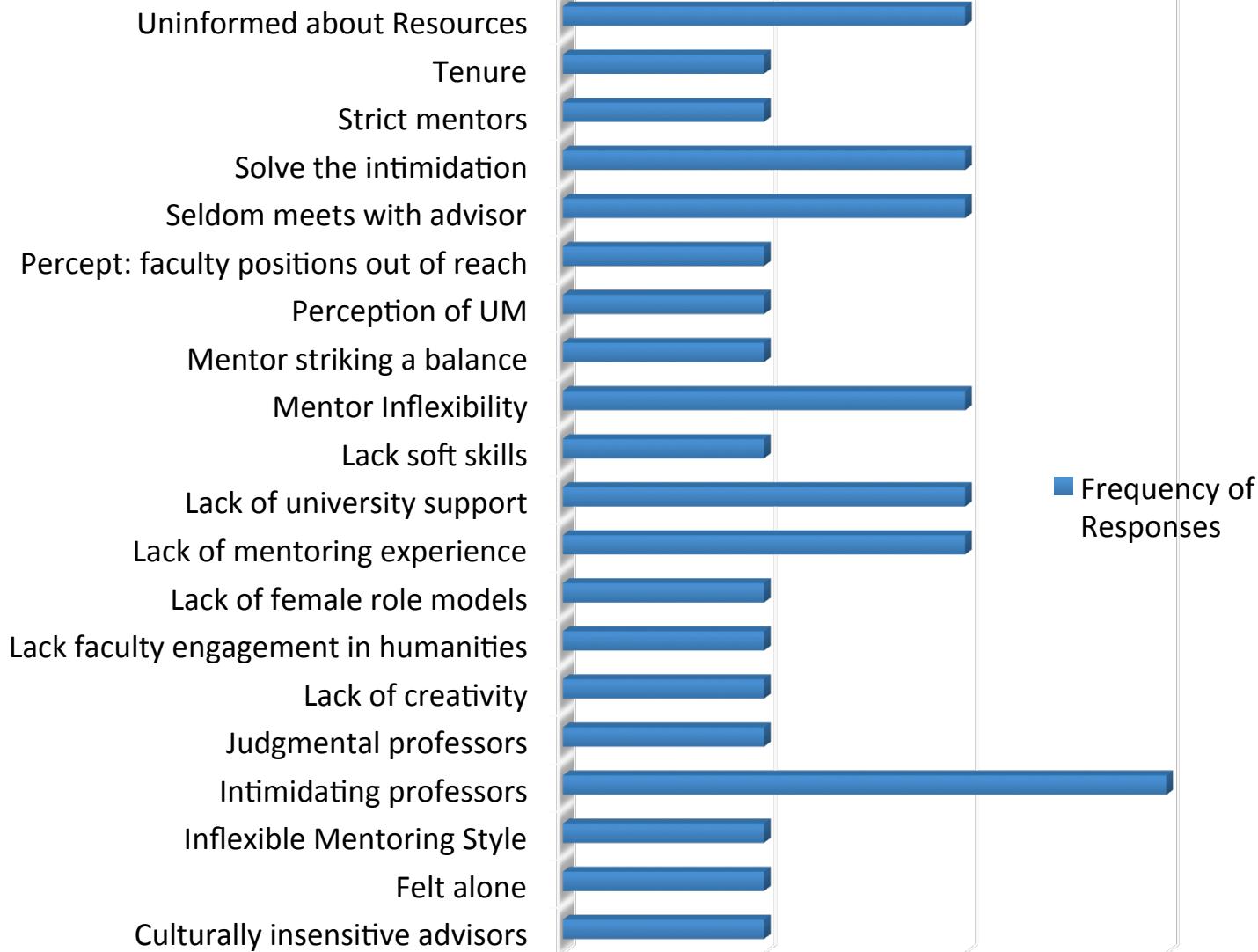
# Challenges Faced by Mentees

Transition to University setting  
Self-imposed Constraints



# Challenges Faced by Mentees

Unsupportive or Ill-prepared advisor



# **Challenges faced by Mentees**

## **Family Pressure**

*Family pressures always towards physicians because that is what the families know. Everybody knows what a physician is. They've all been to the doctor. But when the students are learning about research careers and trying to explain that to the family.*

## **Transition to university setting**

*Everything is very, one is very independent, you have to think on your own, and two, it's very, you have to reason about things abstractly. So sometime you have to think about things and deduct from things that are not really there, but there only there, like, they can only be there in your head; you can't write it down because what would you write down? You just have to think about them and from there go on and explore the possibilities until they make logical sense.*

## **Confidence**

*She didn't trust herself, she had a complete lack of self-confidence.*

# Mentoring Process

Selection and Matching

Preparation

Commitment

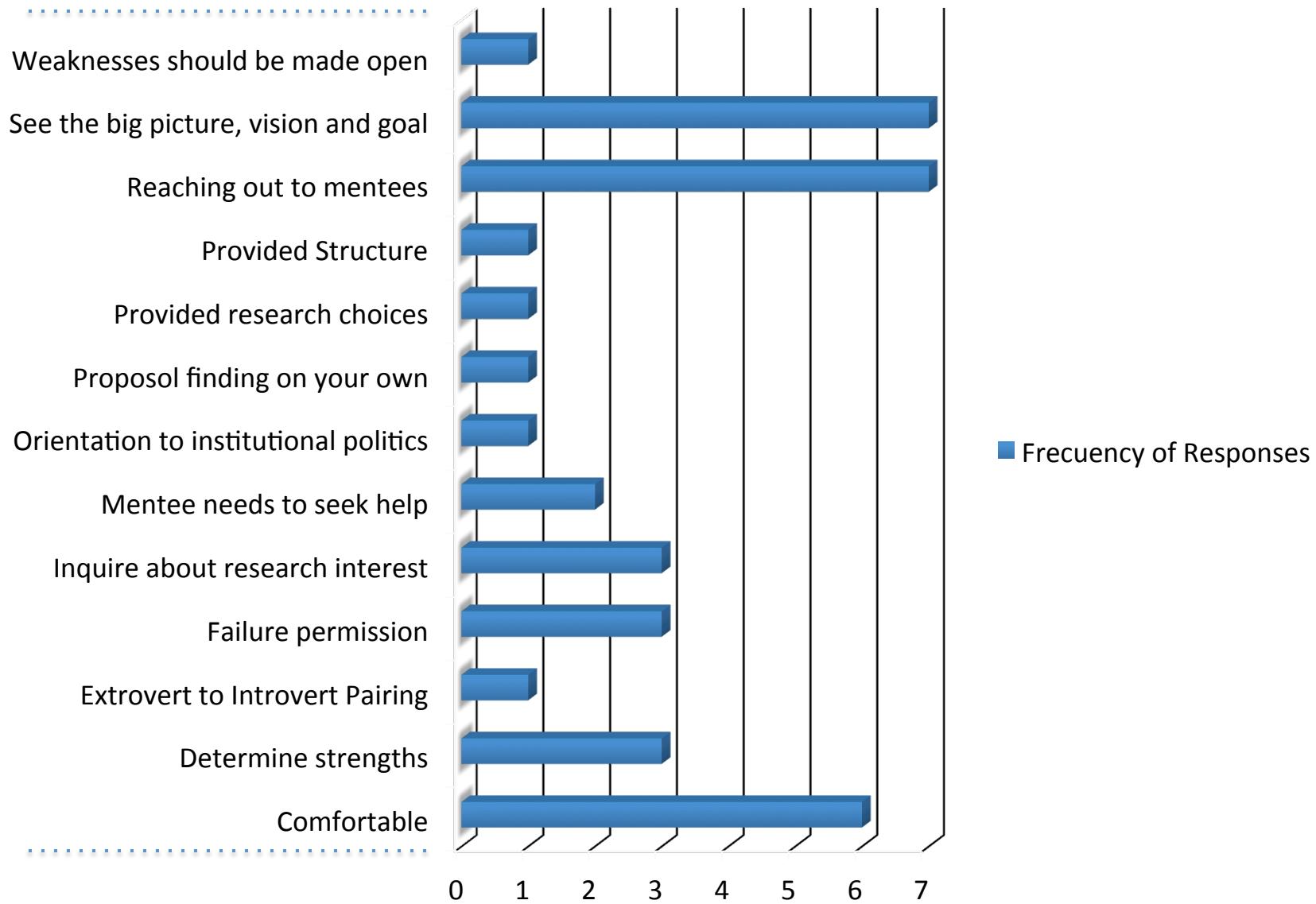
Active Mentoring

Evaluation and Closure

Feedback & Improvement

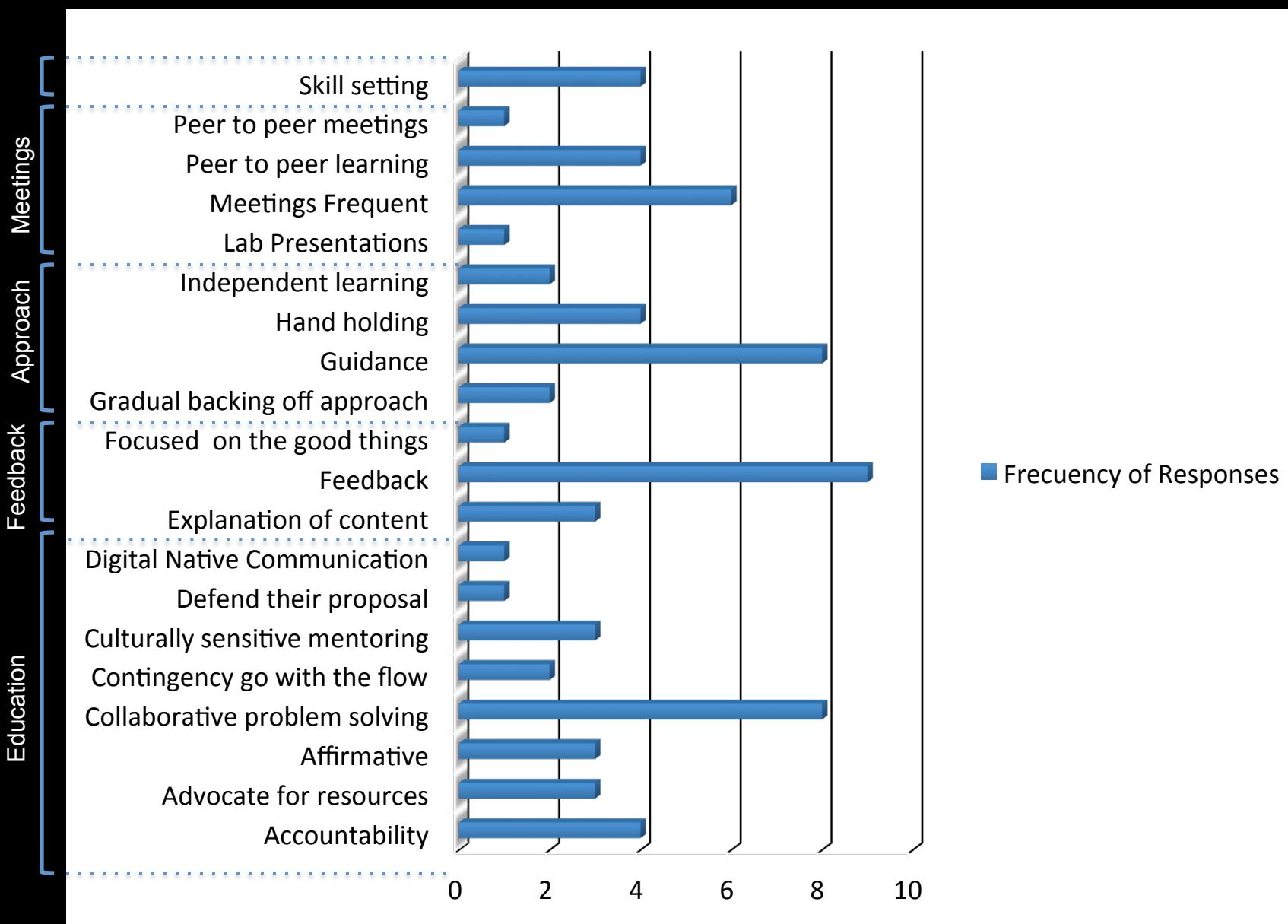
# Mentoring Approaches [PROCESS]

## PREPARATION

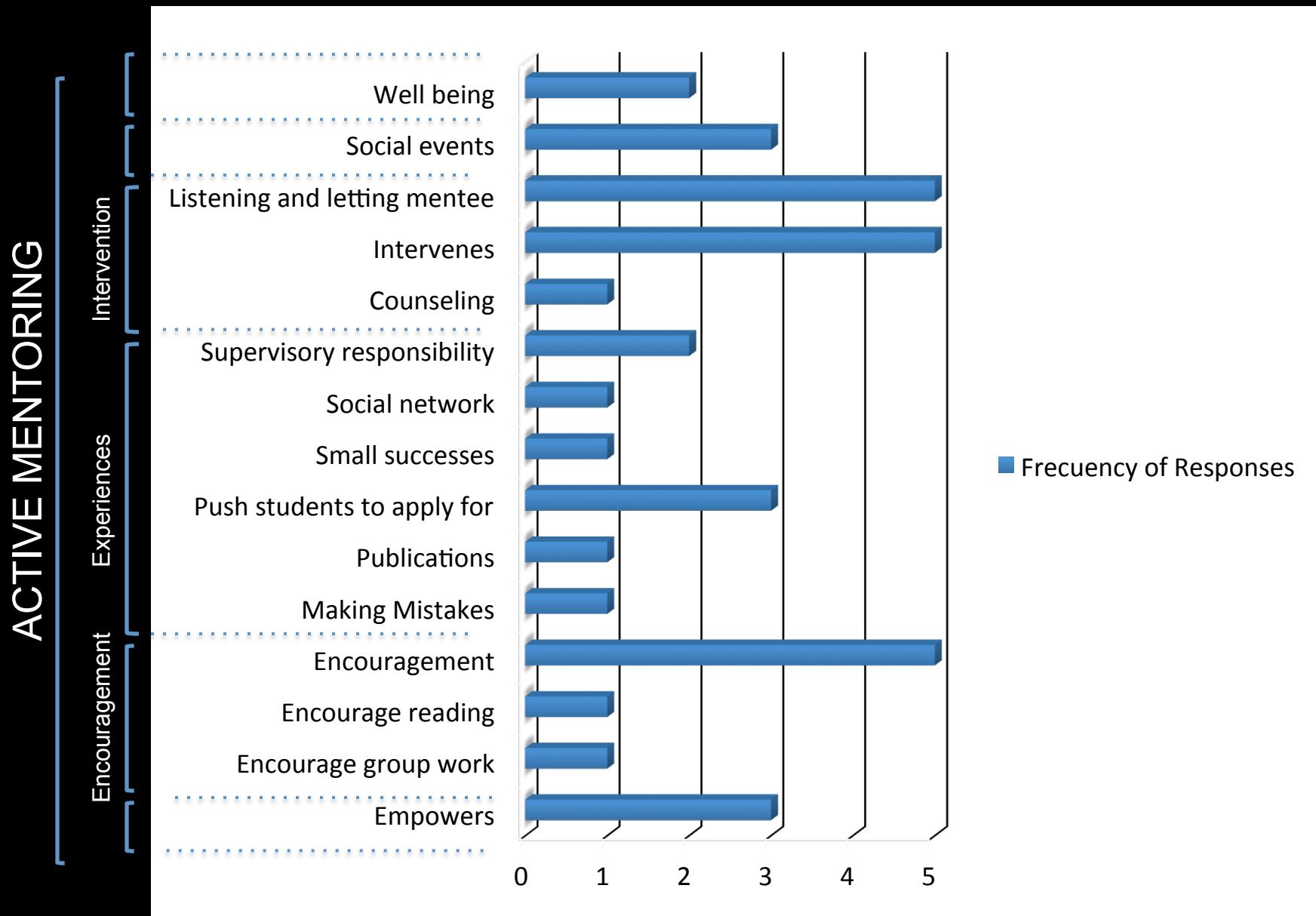


# Mentoring Approaches [PROCESS]

## ACTIVE MENTORING



# Mentoring Approaches [PROCESS]

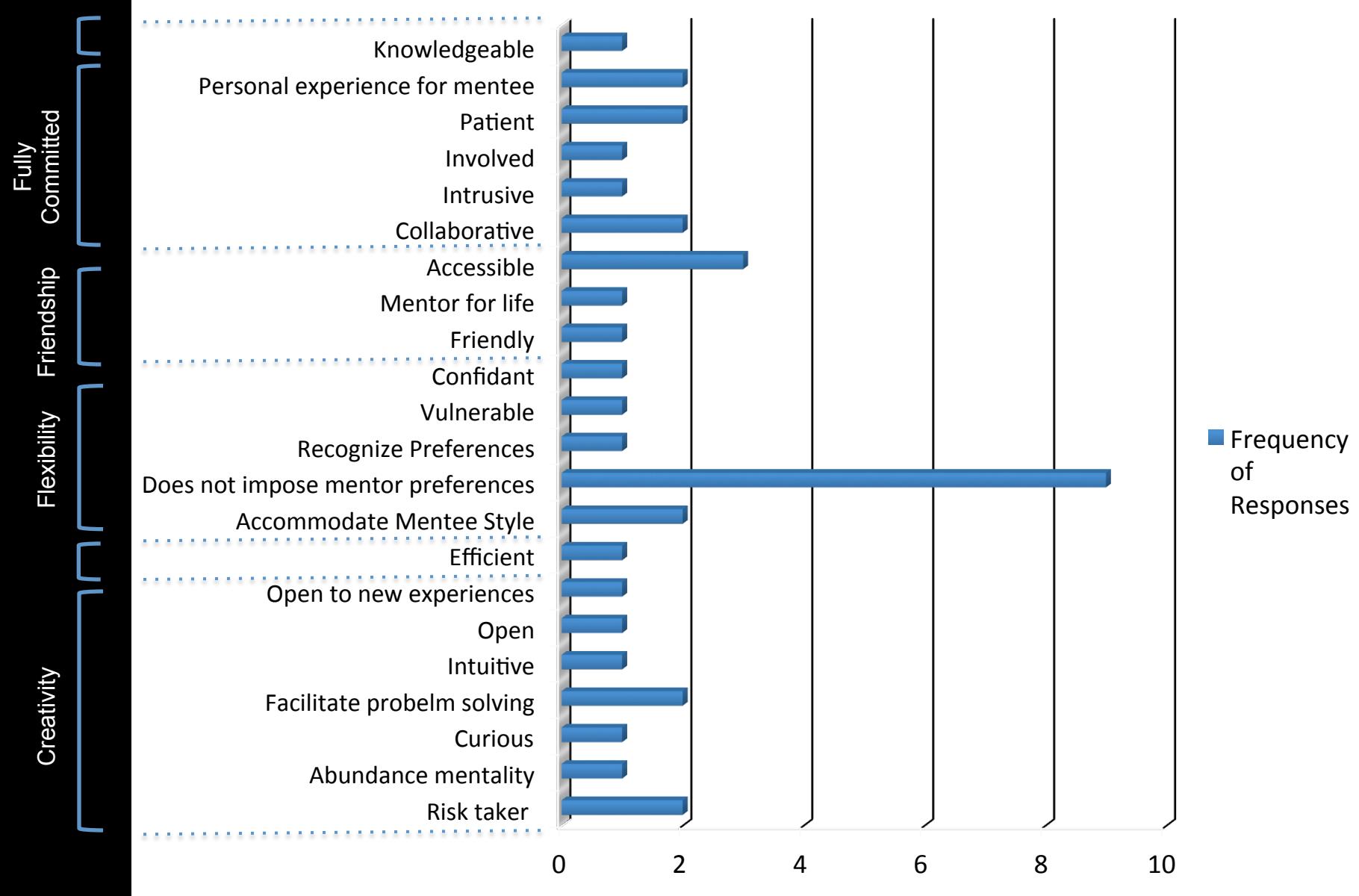


# Mentoring Process

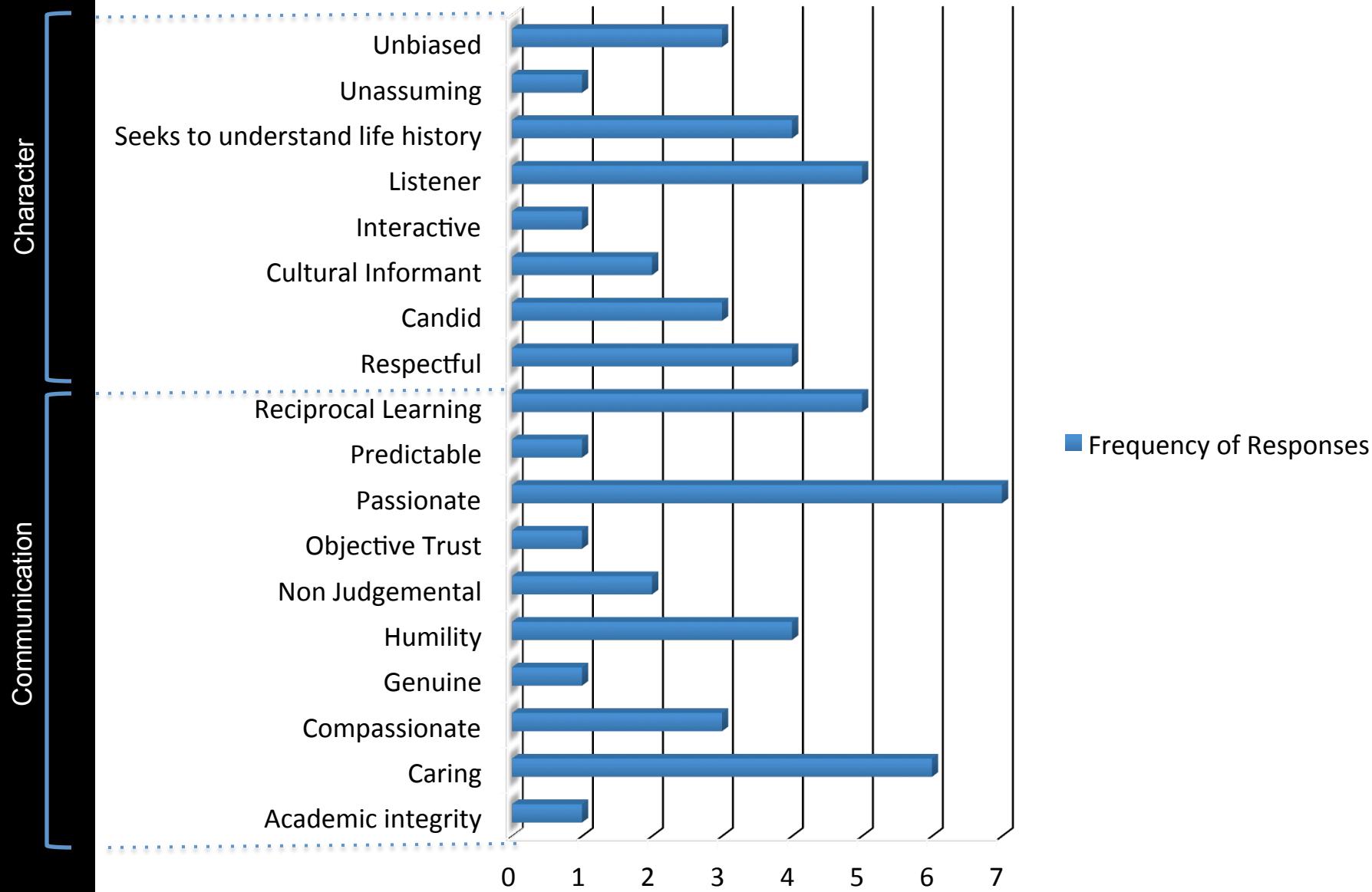
## Culturally sensitive mentoring

*Part of the listening is not to assume that person could do X or Y. I try not to pull apart people, “Okay, you should, you would be a great doctor, you will be a great dentist or whatever” because I feel like I put extra pressure on that young person, so I like approaching it in the way of, “Imagine if you, I don’t know, so you are the first person going to college, right? What would like to be, what’s a job that you would like to have? Imagine what difference that would make in your family, how proud they would be. Or imagine since you’re the first person that just went to college – if you finish”, because I always try to address that in terms of they made immediate goal, what’s going to happen in the future. Because otherwise, they feel like, “It’s so hard, it’s so hard”, so I always try to make it sound.*

# Mentoring Characteristics [PERSON]



# Mentoring Characteristics [PERSON]



# Mentoring Characteristics

## Does not impose mentoring preference

*Everybody is different. So every single student that I have is different and they have different needs and you know, there is no one approach that works for everybody, so flexibility is the thing I would say that people have to build into their mentoring style. And that is a mistake that I think I see a lot of faculty making, is that they try to do a cookie cutter approach, where they try to treat every student exactly the same and that just doesn't work for every student.*

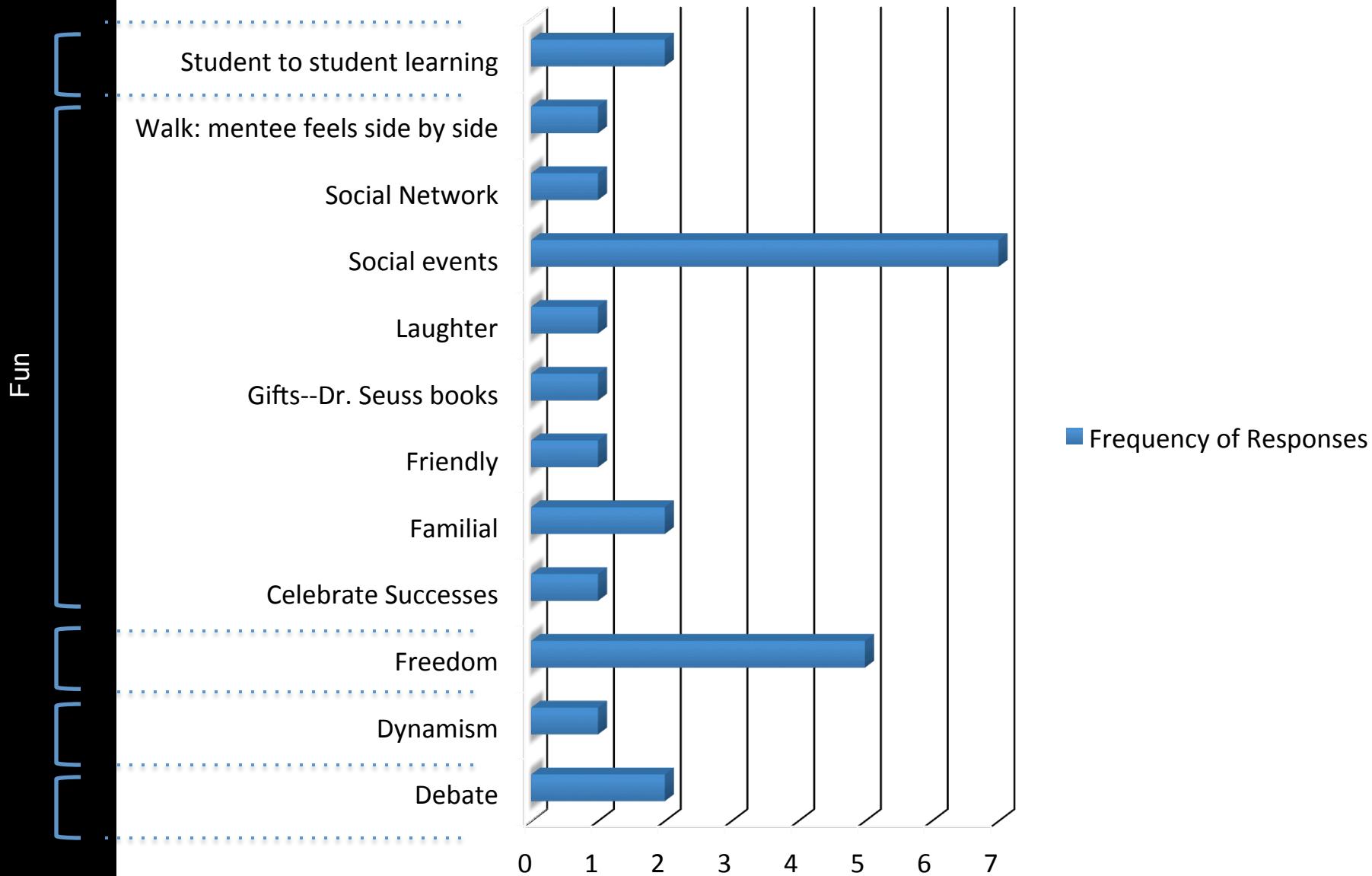
## Seeks to understand life history

*I just remember sitting there with her and we got into this conversation about her background and her history and where she came from and family names, and you know, kind of really just about her experiences and she told me then.*

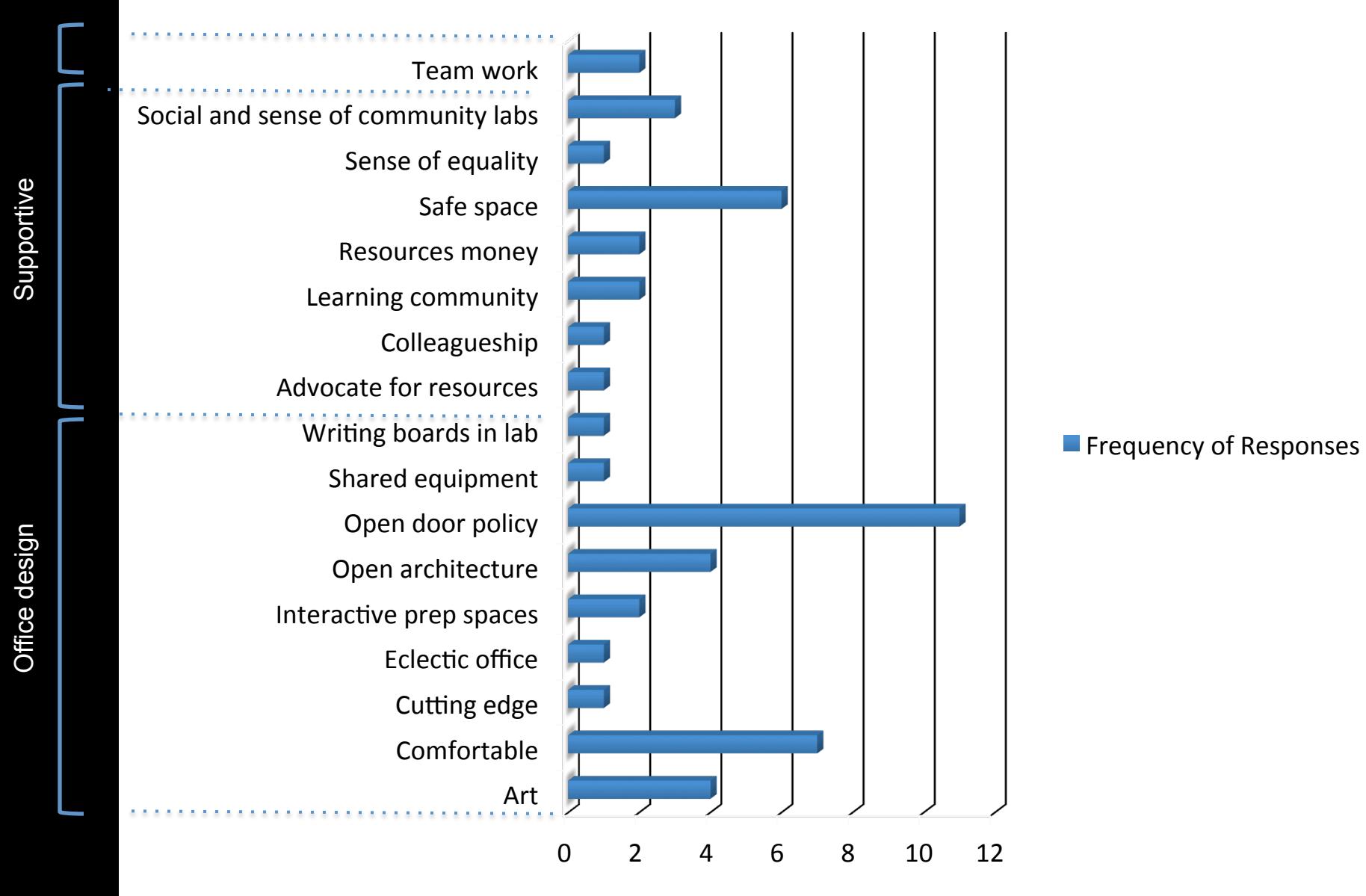
## Caring

*He'd come to the family events – not family events, but community events where he would meet our family. So he took more of an interest than I think I've ever seen any other professors do.*

# Mentoring Environment [PRESS]



# Mentoring Environment [PRESS]



# Mentoring Environment

## Social events

He does have people over his house or we go canoeing or we, we do some things together and he loves to eat food and make different dishes, like paella is one of his favorites.

*That's always kind of like the priority so I always kind of tell students too like when they come in they are kind of like now part of the family.*

*We have, we have some prep spaces right next door, we have a lot more sort of interactive spaces for students to hang out. It is not just a lab.*

# Questions to Start Us Thinking About Exceptional Mentoring

(in pairs, discuss—10 minutes each)

Describe a time that made you most proud--a high point, when you mentored someone successfully to do something challenging.

What were the most memorable parts of the mentoring experience, including challenges?

Reflect on: “root causes of success” What were they?

- ❖ What was it like?
- ❖ What were the events, actions or activities that contributed to that extraordinary level of success and satisfaction?

**Write down the essence of your story's idea**  
(tape the paper on the wall)



# LEGO



# **Exceptional Mentoring**

In small groups design a Lego model to create an ideal state  
(20 minutes)

DESIGN

- ❖ Envision your ideal hopes and dreams for enhancing mentoring within your institute. Answer the question: Ten years from now, mentoring practices that support the selection and retention of quality students will include...
- ❖ Design specific activities and actions to create the institute's ideal future for Mentoring practices

# Social Architecture Design Elements (examples)

Z  
DESIGN  
W

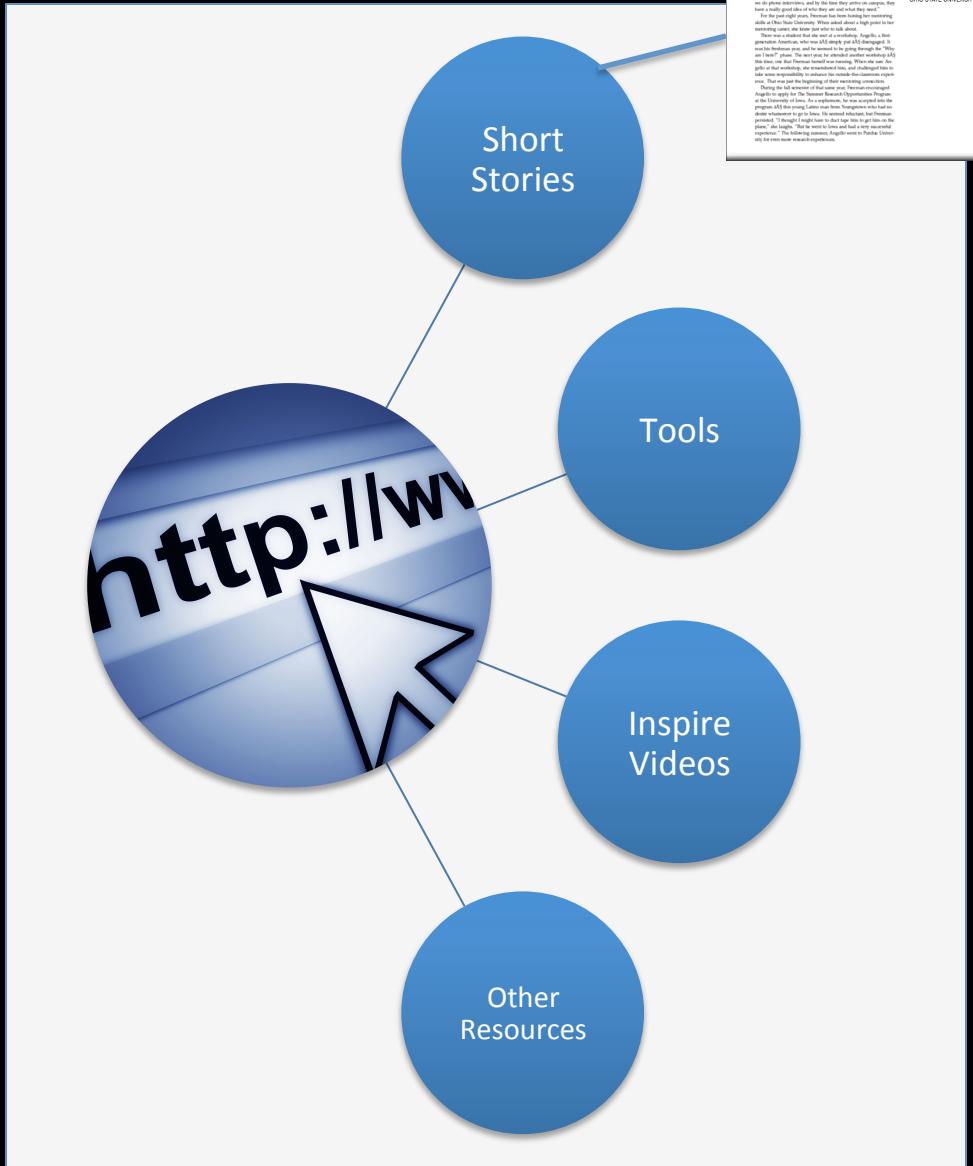
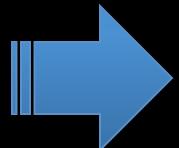
**Business Process**  
**Communication**  
**Competencies**  
**Culture**  
**Customer Relations**  
**Education (Training)**  
**Vision and Purpose**  
**Governance Structure**  
**Leadership**  
**Distribution of Wealth**

**Management Practices**  
**Policies**  
**Relationships**  
**Results**  
**Shared Values**  
**Social Responsibility**  
**Practices and Principles**  
**Societal Purposes**  
**Staff/People**  
**Ecological/Environmental**

**Stakeholder Relations**  
**Strategy**  
**Structure**  
**Systems**  
**Technology**  
**Beliefs about Power and Authority**  
**Alliances & Partner.**  
**Knowledge of Management System**

Cooperrider, D. L., Whitney, D., & Stavros, J. (2005). Appreciative Inquiry Handbook. Brunswick, OH: Crown Custom Publishing

- Interviews
- Qualitative Study
- Conference Presentations
- Webinars
- Workshop





## Cyndi Freeman

Director  
Graduate Student Recruitment  
OHIO STATE UNIVERSITY



**A**ngello was a one in a million student – or at least, he was one in 60,000. As a sophomore in high school, Angello, a first-generation American, had to have brain surgery. He had an aneurysm that needed to be removed. His mother and step-father didn't speak English, so when his diagnosis and options were announced, they were announced to him – a sixteen-year-old boy, who already had too many responsibilities.

Fast-forward three years, when Angello met Cyndi Freeman at a workshop. A freshman at Ohio State University, Angello went through what many students experience: disengagement, and wondering, "Why am I here?" When he was re-introduced to Freeman the following year, at a workshop that she herself was running, she decided to step in.

As a mentor in the sciences at Ohio State, Freeman recognized the potential in Angello. She challenged him to enhance his own experiences outside of the classroom,

and to take some responsibility. With Freeman's influence, Angello applied for and was accepted into the Summer Research Opportunities Program at the University of Iowa. Uncertain and afraid to leave his comfort zone, Angello was reluctant to attend. But Freeman insisted, and Angello decided to attend the summer program – and continued to live outside of his comfort zone from then on.

So how do we encourage and mentor students in Angello's situation? According to Freeman, in an institution with 60,000 students, only one undergraduate Latino male is in computer science and engineering. "He's not going to find another Latino face. He's not going to find a Latino a faculty member. He's the one. So when you find that student, and you're able to connect in a way that is personal and professional, it really means something."

Angello truly benefitted from Freeman's intervention. Aside from attending the Summer Research Opportunities Program, Angello conducted research at Purdue University, was awarded the Generation Google Scholarship, and is furthering his education with the PhD program in Computer Science and Engineering at the University of Illinois.

What was it that made Angello such a success story? Says Freeman, "I think one of the big pieces was forcing

him to go to Iowa." Angello was accepted into a research program during the summer of his sophomore year, where the average tuition is \$15-20,000 per student. He left his comfort zone and his family for three months... and returned a conquering hero. From there he took off: networking with other students and encouraging them apply for programs, becoming a mentor himself. 'There's an African proverb: 'You cannot be a profit in your own village,'" recites Freeman. "At Iowa, Angello saw the reflection of himself in the eyes of others, and learned he was a star."

We all know that one in 60,000 student, who is disengaged but has enormous potential. Why not tap that potential and see how many lives we can change?



THERE'S AN AFRICAN PROVERB: 'YOU CANNOT BE A PROFIT IN YOUR OWN VILLAGE.'



## Cyndi Freeman

Director, Graduate Student Recruitment and Diversity Initiatives at THE OHIO STATE UNIVERSITY – THE GRADUATE SCHOOL

## “INTRUSIVE” FOCUSED Mentor

### Mentor Mindset

- ❖ Intrusive
- ❖ Relentless
- ❖ Research to real-world matchmaker
- ❖ Political astuteness
- ❖ Passionate
- ❖ Risk takers
- ❖ Does not worry about what others will say
- ❖ Frank

### Challenges

- ❖ Students feel that they don't fit.  
*“I'm not as good at that or equal to.”*
- ❖ Students don't understand the larger picture of what they're doing.  
*“I have no idea how these are going to apply.”*

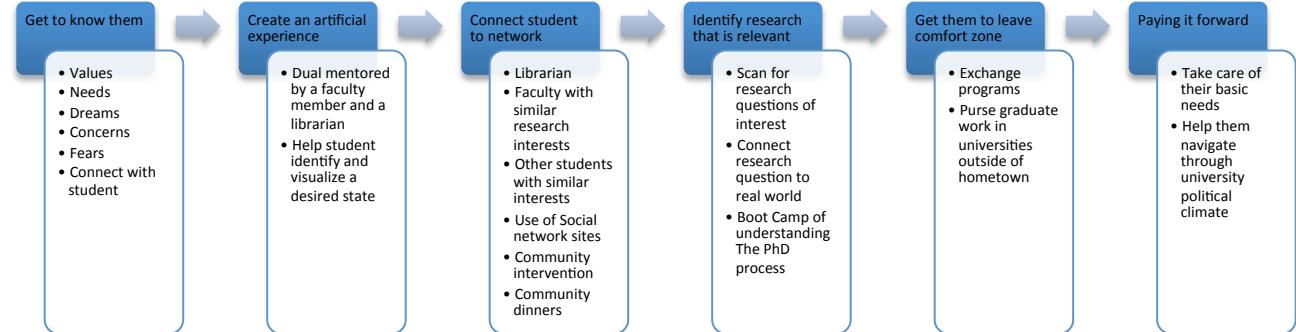
### Environment

- ❖ There are comfy chairs.
- ❖ There some blankets because sometimes it gets cold.
- ❖ I got gifts that students have given me over the years everywhere.
- ❖ Dr. Seuss books such as, “Oh the places you'll go.”
- ❖ Dinner at my home

### Milestones

Angello was a student who would've done fine. He would've graduated here with a degree and gotten a job. But without those conversations about his desire to reach out, reach back, and pull other people up, and him saying, “Wow, I could be a faculty person?” And for him to understand that that was something real.

### Mentoring Process



**Adviser Role:** Help them understand the institution as a whole. How did things really work? what does it mean if somebody's an assistant professor? what is it mean if they're an associate professor? What does it mean if they're full professor? What's the dean? Who's the provost? That's the person that's going to help you navigate the academic landscape to reach her goal and that person should always see sweat and they should never see you cry.

**Mentor Role:** You can come into their office close the door and if you close the door they know that something's up. Student can cry, scream. Mentor helps to fix problem.

**Cultural Informant:** This person informs the student of the political minefield. Tells student who relates to who and what goes on here and how this works.



**Angello Astorga**  
Student Programmer Intern  
OHIO SUPERCOMPUTER CEN

## ANGELLO ASTORGA

Angello was struggling. It was his freshman year as a Computer Science major at Ohio State University, and he had already acquired that label of being a “good student.” But even as a 4.0 student in high school with an Incoming Morill Scholarship to Ohio State, Angello was behind in his curriculum. His low ACT scores forced him to begin taking classes at a lower level than was fitting for his level of experience, which started his college career a semester behind where it should have begun. And as a good student, with a full ride scholarship, Angello sought out counseling services provided by the school to help him cope with his struggles. The counseling was a step in the right direction, but Angello felt as though still needed more support. He needed someone to hold him accountable.

In his sophomore year Angello met Cyndi Freeman, the Diversity Initiatives director at Ohio State. He was attending a workshop on seeking research opportunities when Freeman, the speaker, pointed him out and brought him to the front of the room. “If you’re dressed like this,” she said of Angello, who was wearing sweatpants

# **Interested in building a community?**

<https://whatworks.hub.ki/>

<https://whatworks.hub.ki/community/publications/2>

**cabrajf@buffalostate.edu**

## Appreciative Inquiry Resources

Cooperrider, D., Whitney, D. D., & Stavros, J. M. (2008). *The appreciative inquiry handbook: For leaders of change*. Berrett-Koehler Publishers.

Hammond, S. A. (2013). *The thin book of appreciative inquiry*. Thin Book Publishing.

Lewis, S., Passmore, J., & Cantore, S. (2008). *Appreciative inquiry for change management: Using AI to facilitate organizational development*. Kogan Page Publishers.

Stratton-Berkessel, R. (2010). *Appreciative inquiry for collaborative solutions: 21 strength-based workshops*. John Wiley & Sons.

*Encyclopedia of Positive Questions: Volume One: Using Appreciative Inquiry to Bring Out the Best in Your Organization*. Crown Custom Publishing, 2005.