“Steer Your Own Ship: Using Metacognition for Reflective Self-Mentoring”

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Desired outcomes

- We will understand the importance of structured self-mentoring
- We will understand the role of metacognition in self-mentoring
- We will understand the importance of self-understanding, self-talk, and cognitive restructuring in self-mentoring
- We will have specific strategies for effective self-mentoring
- We will have greater confidence and more control over our destinies
Reflection Questions

- Who has been the most important mentor in your academic/professional life?
- What was the most impactful advice they ever provided you?
- Has there ever been an instance where you needed a mentor but none was available?
- Have you ever received advice from a mentor, but realized at the time, or found out later, that it was not the best advice for you?
What is Self-Mentoring?

A type of mentoring in which an individual cultivates his or her own professional growth through self-tutoring activities and resource-finding techniques. Self-mentoring requires the individual to be highly motivated and self-disciplined. The individual increases job effectiveness and augments professional talents by building a body of knowledge and skills without the aid of other people.

www.quartermaster.army.mil/oqmg/warrant_officer_proponency/mentorship_program/GUIDE/Chapter_VIII.htm
Things a Mentor Can Offer… that you can provide for yourself!

- **Information about the culture of an institution/organization**
  Observe and discern the rules/norms/mores

- **Tools and strategies for success**
  Observe and talk to others who have advanced

- **Information about resources**
  Google it!

- **Encouragement & Inspiration**
  Encourage yourself by reflecting on past successes!
Metacognition: A Very Useful Tool

The ability to:

- think about your own thinking
- be consciously aware of yourself as a problem solver
- monitor, plan, and control your mental processing (e.g. “Am I understanding this material, or just memorizing it?”)
- accurately judge your level of learning
- know what you know and what you don’t know

Counting Vowels in 45 seconds

A E I O U

How accurate are you?

Count all the vowels in the words on the next slide.
Dollar Bill
Dice
Tricycle
Four-leaf Clover
Hand
Six-Pack
Seven-Up
Octopus
Cat Lives
Bowling Pins
Football Team
Dozen Eggs
Unlucky Friday
Valentine’s Day
Quarter Hour
How many *words* or *phrases* do you remember?
Let’s look at the words again…

What are they arranged according to?
<table>
<thead>
<tr>
<th>Dollar Bill</th>
<th>Cat Lives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dice</td>
<td>Bowling Pins</td>
</tr>
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<td>Seven-Up</td>
<td>Quarter Hour</td>
</tr>
<tr>
<td>Octopus</td>
<td></td>
</tr>
</tbody>
</table>
NOW, how many words or phrases do you remember?
What were two major differences between the two attempts?

1. We knew what the task was
2. We knew how the information was organized
Strategies for “Self-Mentoring”

- Use critical thinking to discern the rules and culture of the institution. (e.g. vowels vs. words)
- Understand yourself and others (personality, mindset, etc.)
- Talk with others who have succeeded to find out how they did it.
- Encourage yourself by using positive self-talk and constantly reminding yourself that the talents that brought you to this point will lead you to future success.
You *must* know yourself and others

- What are your personal characteristics?
  - Personality style (MBTI)*
  - Learning style preference (VARK)*
  - Job interests
  - Mindset (Fixed vs. Growth Intelligence)

- What are the personal characteristics of those with whom you work?

*www.cas.lsu.edu*
What is your MBTI personality type?

- Extrovert or Introvert
- Sensing or Intuitive
- Thinking or Feeling
- Judging or Perceiving

How does your style impact your interaction with others?

http://www.myersbriggs.org/my-mbti-personality-type/mbti-basics/
Develop the **Right Mindset**


Mindset* is Important!

- **Fixed Mindset**
  Intelligence is static
  You have a certain amount of it

- **Growth Mindset**
  Intelligence can be developed
  You can grow it with actions

New York: Random House Publishing
### Responses to Many Situations are Based on Mindset

<table>
<thead>
<tr>
<th></th>
<th>Fixed Intelligence Mindset Response</th>
<th>Growth Intelligence Mindset Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Challenges</strong></td>
<td><strong>Avoid</strong></td>
<td><strong>Embrace</strong></td>
</tr>
<tr>
<td><strong>Obstacles</strong></td>
<td><strong>Give up easily</strong></td>
<td><strong>Persist</strong></td>
</tr>
<tr>
<td><strong>Tasks requiring effort</strong></td>
<td><strong>Fruitless to Try</strong></td>
<td><strong>Path to mastery</strong></td>
</tr>
<tr>
<td><strong>Criticism</strong></td>
<td><strong>Ignore it</strong></td>
<td><strong>Learn from it</strong></td>
</tr>
<tr>
<td><strong>Success of Others</strong></td>
<td><strong>Threatening</strong></td>
<td><strong>Inspirational</strong></td>
</tr>
</tbody>
</table>
**TWO MINDSETS**

**Fixed Mindset**
- Intelligence is static
- Leads to a desire to look smart and therefore a tendency to avoid challenges
- Give up easily
- See effort as fruitless or worse
- Ignore useful negative feedback
- Feel threatened by the success of others

**Growth Mindset**
- Intelligence can be developed
- Leads to a desire to learn and therefore a tendency to embrace challenges
- Persist in the face of setbacks
- See effort as the path to mastery
- Learn from criticism
- Find lessons and inspiration in the success of others

**As a result, they may plateau early and achieve less than their full potential.**

**As a result, they reach ever-higher levels of achievement.**

All this confirms a deterministic view of the world.

All this gives them a greater sense of free will.
What mindset do you think *most* students have about intelligence?

**Fixed or Growth Mindset?**
What mindset do you think most faculty have about student intelligence?

Fixed or Growth Mindset?
What mindset do you think *most* STEM faculty have about student intelligence?

**Fixed or Growth Mindset?**
Expect Obstacles

Remember that stumbling blocks and stepping stones may look identical. YOU determine which role they will play!
Meet the family that helped me develop a growth mindset...
My Dad, Robert E. Yancy, Jr.
My Mom,

Delsie Melba Moore Yancy
James and Ruth Smith Professor of Physics at Southern University

Elected Fellow of the American Physical Society (2008) “for his leadership in exploring new ways for research physicists, traditional educators and museum professionals to work together to engage students and the public, particularly under-represented groups, in the excitement of physics.”

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Pediatrician and Pediatric Allergist and Immunologist, Clinical Assoc. Professor, Baylor College of Medicine

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M.D., Duke University Residency, Baylor College of Medicine Research Fellowship, Baylor College of Medicine
Stephanie McGuire, D. Phil. Neuroscience

As herself in *Stephanie McGuire: Mezzo Laid Bare*, Marcellina in *The Marriage of Figaro*, and Dinah in *Trouble in Tahiti*

M.M. Opera Performance

Mezzo Soprano

S.B., Biology, Marshall Scholar, MIT
M.Mus., Longy Conservatory

Has appeared with the Boston Pops, New York City Opera in Lincoln Center and at Carnegie Hall
Monitor Your Self-Talk:
What are you saying to yourself?

- “I can’t do this work, it is too much.”
- “I’m not as good as the others.”
- “I remember the last time I tried this and failed.”
- “I must be an idiot. What makes me think I can do this?”
- “I’ll never learn to master this.”
The Antidote to Negative Self Talk: 
*Positive Self-Talk*

- Turning negative, destructive thoughts into positive, constructive thoughts
- Facilitated by objectively evaluating the validity of negative thoughts
- Forces the adoption of a different perspective
- Reflection and journaling can be important tools
How Can We Rephrase the Negative Thoughts into Positive Thoughts?

- “I can’t do this work, it is too much”
- “I’m not as good as the others”
- “I remember the last time I tried this and failed”
- “I must be an idiot. What makes me think I can do this?”
- “I’ll never learn to master this”
Time for a Cognitive Restructuring: Attitude Adjustment

- Turn negative, destructive thoughts into positive, constructive thoughts
- Objectively evaluate the validity of negative thoughts
- Adopt a different perspective (this is not a stumbling block; it’s just a stepping stone)
- Reflection and journaling can be important tools
Self-Mentoring Strategies*

- Write down your goals to avoid being sucked into other people’s agendas.
- Prepare, prepare, prepare more!
- Ask questions and listen carefully to the experts in your field of interest.
- Observe people in leadership positions. Notice the different styles of leadership and which are effective.
- Brainstorm with yourself!
- Form support groups with other faculty, within and outside of your discipline.
- Carefully monitor your self-talk and mindset.

*retrieved from www.quartermaster.army.mil/oqmg/warrant_officer_proponency/mentorship_program/GUIDE/Chapter_VIII.htm
More Self-Mentoring Strategies

- Leave complaints and judgements at the door.
- When there is more than one way to interpret an action, choose the more charitable one.
- Recognize that a little paranoia is not always bad.
- Try not to take criticisms personally; learn from them.
- Read and research materials in the field.
- Attend and present papers at conferences and other educational programs.
- Seek out new opportunities. Volunteer for projects or join professional organizations – but not too many!
- Get the perspective of trusted family members

*retrieved from www.quartermaster.army.mil/oqmg/warrant_officer_proponency/mentorship_program/GUIDE/Chapter_VIII.htm
Metacognitive Self Mentoring

A tool that works beautifully!
Additional References

- Feibelman, P. J. *A Ph.D. is Not Enough!* New York: Basic Books
Useful Websites

- www.cas.lsu.edu
- www.vark-learn.com
- www.mentornet.net
- Searches on www.google.com
And for students