A CULTURE OF MENTORING AT TEXAS A&M UNIVERSITY

University Staff Council: Common Grounds
June 18, 2024

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Center for Teaching Excellence





HOWDY

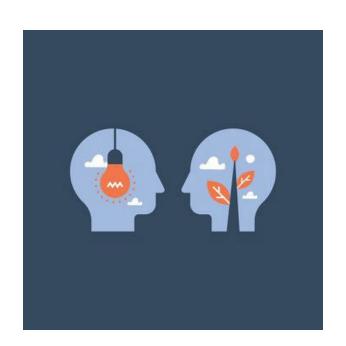
TODAY'S SESSION

- Background literature
- Texas A&M University Context
 - Community of Mentors
 - Mentorship Development
 - Mentoring Plans
 - Emerging Collaborations
 - Educational Research
- Mentorship resources
- Questions & Answers



Why is Mentoring Important?

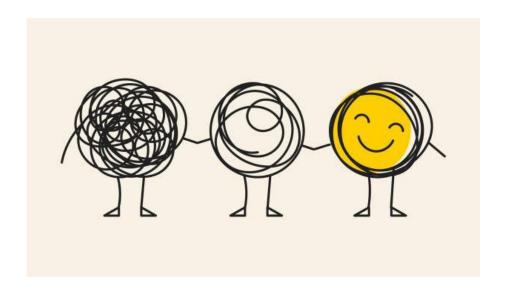
- Impact on Mentees?
- Impact on Mentors?





Why is Mentoring Important?

Potential for TRANSFORMATION!





Science of Effective Mentoring

- National Academies of Science, Engineering, and Medicine. 2019. The Science of Effective Mentorship in STEMM. Washington DC: The National Academies Press. https://doi.org/10.17226/25568
- Mentoring experiences can be transformative (p. 15)
- Despite its important place in the academic culture, mentorship rarely receives the focused attention, evaluation, and recognition of other aspects of the professional development process, such as teaching and research. (p. 16)
- Online Guide: https://www.nap.edu/resource/25568/interactive/



Center for the Improvement of Mentored Experiences in Research (CIMER)

CIMER Mission - Improve the research mentoring relationships for mentees and mentors at all career stages and disciplines through the development, implementation, and study of evidence-based and culturally-responsive interventions.

CIMER History - A UW-Madison team led by Dr. Christine Pfund established CIMER in 2015 with support from the Wisconsin Center for Educational Research to begin the work of expanding efforts to implement and investigate ways to improve research mentoring relationships in higher education settings.



Definition of Mentorship

Mentorship is a professional, working alliance in which individuals work together over time to support the personal and professional growth, development, and success of the relational partners through the provision of career and psychosocial support.

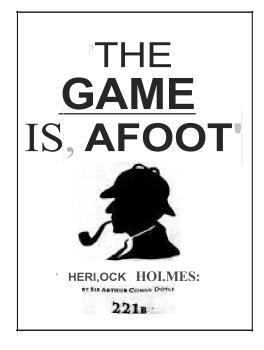
The Science of Effective Mentorship in STEMM, National Academies of Sciences, Engineering, and Medicine 2019. Washington, DC: The National Academies Press. https://doi.org/10.17226/25568

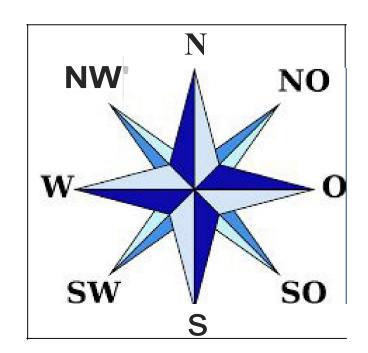


A Culture of Mentoring at Texas A&M



TEXAS A&M







Culture of Mentoring

- Five Domains
- Emergent
- Iterative
- Collaborative
- Within & across



TEXAS A&M UNIVERSITY

- 75,000+ students
- 17,000+ graduate & professional students
- 4,000+ faculty
- 11,000+ staff
- 1 billion+ research funding revenue
- Multiple campuses affiliated with flagship institution





Community of Mentors

It all began not that long ago...

- Provost Fierke and Office of the Dean of Faculties
- CIMER trained facilitators
- Mentoring Think Tank
- Faculty case studies
- Spring Break 2020
 - Flip to virtual delivery
 - Innovate and adapt CIMER



Mentoring Academies

TAMU MENTORING ACADEMIES

Goal: Improve Mentoring Experiences

Target Audiences: Graduate and Professional Students, Faculty, Postdocs

& Staff

Competencies: Evidence-based competencies

- Maintaining effective communication
- Aligning Expectations
- Fostering Independence
- Assessing Understanding
- Promoting Professional Development
- Supporting Well-being

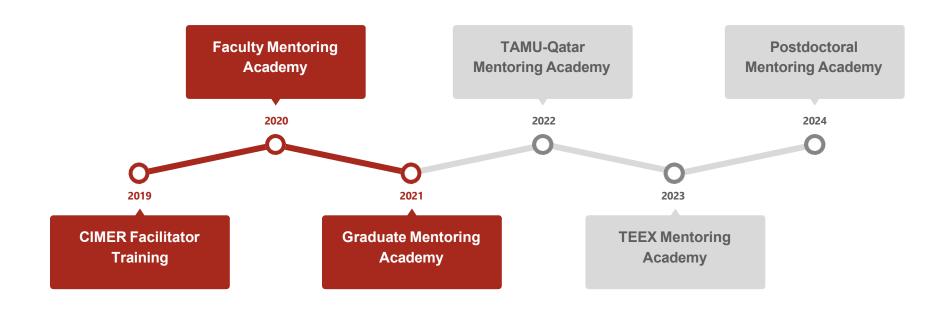
 Cultivating Ethical Behavior

 Enhancing Work-life Integration

CAPSTONE: Articulating Your Mentoring Plan & Philosophy



TAMU MENTORING ACADEMY TIMELINE





Mentoring Within and Across...

As of today, 450+ completed!

- **100+ Faculty**
- 225+ Doctoral
- 55+ Masters
- 70+ Staff





GMA-Summer 2024

Mentorship Competency	Date	Time	
Fostering Independence	Tuesday, June 18th- Virtual	1:00 PM	
Promoting Professional Development	Thursday, June 20th- Virtual	11:00 AM	
Supporting Well-Being	Wednesday, June 26th- Virtual	11:00 AM	
Supporting Well-Being	Thursday, June 27th- Virtual	1:00 PM	
Assessing Understanding	Tuesday, July 9th- Virtual	2:30 PM	
Aligning Expectations	Wednesday, July 10th- Virtual	10:00 AM	
Promoting Professional Development	Monday, July 15th- Virtual	10:00 AM	
Maintaining Effective Communication	Thursday, July 18th- Virtual	1:00 PM	
Fostering Independence	Tuesday, July 30th- Virtual	10:00 AM	
Assessing Understanding	Thursday, August 1st- Virtual	1:00 PM	

TMA-Summer 2024 | CAPSTONE Offerings Register AFTER completing other competencies

Articulating Your Mentoring Philosophy and Plan	August
Facilitator Training	June 21



BECOME A TAMU MENTORING ACADEMY FELLOW!

- Complete all competencies
- Letter of completion for faculty
- Attend the Train the Trainer workshop and become a TAMU Mentoring Academy Facilitator



Mentoring Plans

Formalizing Mentorship

- Review relevant literature
- Within and across
- Department Head workshop - September 2019
- Begin the "formalize mentoring" conversation
- Leading a Mentoring
 Culture cohorts



Developing a Department Faculty Mentoring Plan

Updated February 2, 2023

Increasingly faculty face a multitude of responsibilities, an expectation of greater autonomy relative to financial and staff support, and continuously evolving directives, expectations, and leadership structures. Thus, formal mentoring programs for faculty at all career stages are more essential today than ever. Developing a departmental plan to provide the mentoring appropriate for a given discipline, for all faculty career stages, and the missions for the department and college should involve both leadership and faculty from all ranks and titles. Furthermore, leadership and faculty should familiarize themselves with the evidence-based practices associated with successful mentoring. Mentorship within the academic culture can aid in building successful careers for faculty and students, develop intellectual and professional networks, and provide mentors with educational opportunities to further develop their roles. This resource was developed to guide departments as they create formal mentoring plans, allowing them to both evaluate existing approaches and reimagine needed components in the context of the evidence-based literature. There is no prescription intended with this resource, rather it is meant to serve as both a prompt for brainstorming, and a guide for available resources.

Evidence for Department Mentoring Plan	Questions for Consideration		
Definition of mentoring (Science of Effective Mentoring in STEMM, 2019)	How would you define mentoring in your department? Faculty Postdocs Graduate and professional students Undergraduate students Staff How are the definitions the same? Different?		

Institutional Collaborations

A CULTURE OF MENTORING AT TEXAS A&M

- Office of the Provost & Faculty Affairs/Center for Teaching Excellence
 - Faculty Mentoring Academy
 - Departmental Mentoring Plans
 - Department Head Trainings
- Graduate and Professional School
 - Graduate Mentoring Academy
- Vice President for Research
 - Postdoc Mentoring Academy
 - RCR Core Training







Educational Research

Noteworthy findings

- Over 97% of participants believed the session(s) was a valuable use of their time.
- Participants responded they would recommend the session to a colleague was highly rated (74.4% - 85.7%).
- Across all competency sessions, the lowest participant intent to implement action(s) within mentoring relationships was 74.4%, supporting the evidence-based competencies and learning outcomes.
- Capstone Nearly half respondents (43.27%) shared their intent to implement practices and strategies to align expectations in their mentoring relationships

Most recent research and findings

- Purpose investigate the outcome measured in participants' confidence associated with six Mentoring Academy competencies and capstone session.
 - RQ 1 How does participation in Mentoring Academy impact participant's perceived competency confidence?
 - RQ 2 How do various program factors (DELIVERY--virtual or face-to-face and FORMAT--immersion or non-immersion) influence participant outcome(s)?



RESEARCH DESIGN

Case study and human-subject research

Data collection:

- February 2021 to December 2023
- Mentoring Academies:
 - Faculty Mentoring Academy, Graduate Mentoring Academy
- Competencies:
 - Maintaining Effective Communication, Aligning Expectations, Fostering Independence, Assessing Understanding, Promoting Professional Development, Addressing Equity & Inclusion, Articulating Your Mentoring Plan & Philosophy
- Competency confidence (5-pt likert scale for pre/post survey)



DATA COLLECTION EXAMPLE

Pre-Test and Informed Consent

Please complete the Link on your Agenda for the Informed Consent (Qualtrics) and the Pre-Test (Google Form)

- 1. How confident are you in your ability to align expectations in your mentoring relationships?
- O Not at all confident
- Slightly confident
- Somewhat confident
- Fairly confident
- Extremely confident



Demographic Results

- Participants (*n*= 418)
- TAMU Mentoring Academy Sessions
 - FMA (*n*= 54)
 - o GMA (*n*= 51)
 - Capstone (*n*= 12)

- Delivery
 - Virtual (n= 96)
 - Face-to-face (*n*= 21)
- Format
 - o Immersion (n=25)
 - Non-Immersion (*n*= 92)

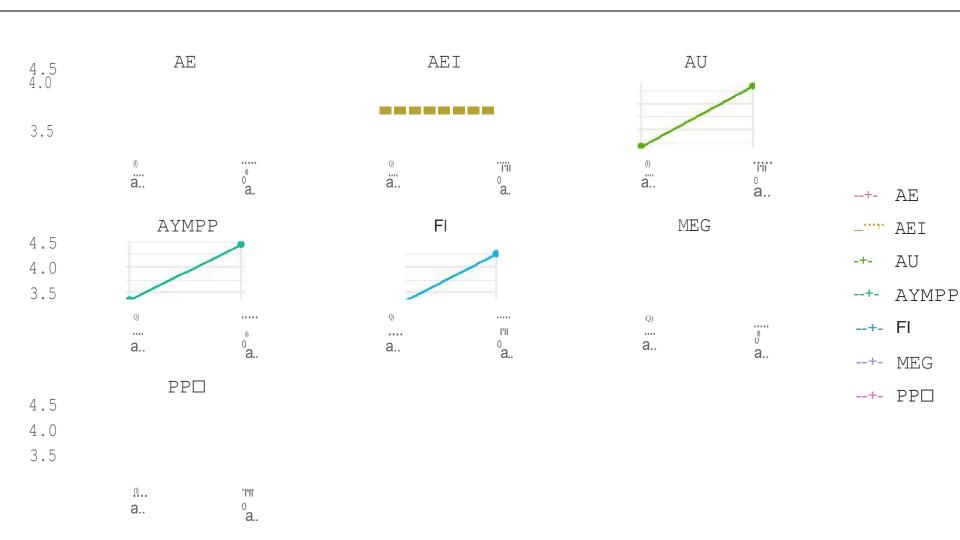


RQ1: Paired-samples T Test Results

Competency	Pre	Post	Post-Pre	t	df	P (1-tailed)
AE	3.09	4.20	1.11	21.95	224	<.001
AEI	3.44	4.17	0.73	8.92	86	<.001
AU	3.16	4.34	1.18	23.92	212	<.001
FI	3.13	4.27	1.14	19.42	183	<.001
MEC	3.56	4.19	0.63	9.38	95	<.001
PPD	3.29	4.19	0.90	13.92	113	<.001
AYMPP	3.35	4.44	1.08	15.51	100	<.001

All TAMU Mentoring Academy competencies demonstrated significant improvement following participation in the mentoring sessions.





RQ2: Multiple Regression Results

	AE_Post	AEI_Post	AU_Post	FI_Post	MEC_Post	PPD_Post	AYMPP_Post
Immersion (vs. non-immersion)	03	N/A	13	06	N/A	24	.01
FMA (vs. GMA)	41***	.05	70*	43***	12	48***	N/A
In person (vs. Virtual)	14	.25	.12	.01	.11	.13	N/A
Pre-test	.42***	.47***	.38***	.35***	.56***	.42***	.46***
Intercept	3.04***	2.53***	3.25***	3.24***	2.23***	2.98***	2.92***
Adjusted R ²	.33	.40	.26	.26	.47	.39	.40
N	179	87	127	158	96	111	101

After controlling for the pre-test score in each model, it was found that the FMA group had significantly lower post-test scores in AE, AU, FI, and PPD, in comparison to the GMA group. In other words, the GMA group shows **higher** scores in 4 competencies than the FMA group.

KEY TAKEAWAYS

- Justification and 'win' for Culture of Mentoring initiative
 - Early evidence for the value of engaging in TAMU Mentoring Academy (FMA and/or GMA)
 - Evidence in value of delivery and format options
- Mentoring competencies are important for our campus participants
- TAMU Mentoring Academy engagement has a positive impact
- GMA participation was statistically significant different than FMA for 4 competencies (AE, AU, FI, and PPD)



LOOKING AHEAD

- Contributes to Culture of Mentoring initiative at Texas A&M University
 - Affirms collaboration and shared vision
 - Increased awareness of TAMU-branded mentoring resources
- Evidence-based competencies are important
 - Connects with CIMER findings and prior case study findings (Mentoring Institute, 2023)
 - Customized collaborations and requests
 - Engagement improves competence across all competencies



Mentorship Resources

TAMU Doctoral - Individual Development Plan

http://tx.ag/TAMUIDP

TAMU Mentoring Compact

http://tx.aq/TAMUGRADCOMPACT

Guiding Questions

- 1. What are your initial reactions?
- 2. As a TAMU staff member, how could these resources influence your mentoring relationships?

Building a Culture of Mentoring

- Consider using these opportunities to support Federal
 Training grants (NIH, NSF, USDA, Dept. Ed, etc.)
- Research shows a distinct disconnect between how well mentors perceive they are mentoring and how mentees believe they are mentoring
- Even the **best mentors improve** when they **invest** in mentor development
- Together, we can all work to build a culture of mentoring that supports our students, postdocs, staff, and faculty colleagues

A Special Thanks To:

Office of the Provost & Faculty Affairs

The Center for Teaching Excellence

The Graduate and Professional School

The Center for the Improvement of Mentored Experiences in Research (CIMER)

University of New Mexico's Mentoring Institute

International Mentoring Association (IMA)

And Most importantly....YOU!







Questions, Comments, or Concerns?



Be awesome!

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