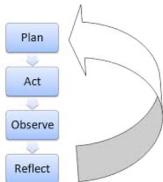


Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education  
Research and Development

## Clinician-Educators in Learning Communities Develop Through Action Research Projects



Stacey Pylman, PhD  
Amy Guenther, PhD  
Brad Riley, MD  
Kelly Armstrong, MD

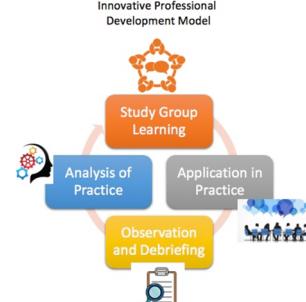
ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

1

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education  
Research and Development

## Medical Educators - Excellence in Teaching (MEET)



- 10-12 fellows across 2 campuses meeting in small groups
  - Meet 8 times over academic year
- Ongoing cycle of learning, practice, observation & feedback, and analysis

ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

2

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education  
Research and Development

## MEET - Overarching Ideas & Work

- Teaching is unnatural and complex work<sup>1</sup>
- Collaborative inquiry into practice<sup>2</sup>
- Learning strategies to engage all learners and uncover student thinking
- Learning from practice (observation, videos, debriefs, and reflection)
- Studying own teaching practice through an Action Research scholarly project



ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

3

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education  
Research and Development

## Action Research

The goal of action research is to **investigate** a self-selected issue in a teacher's own classroom **to effect positive changes** in their teaching and in their students' learning.<sup>3,4</sup> The purpose of action research is to help teachers develop as a reflective practitioner by **regularly examining** the benefit of **teaching actions** on student engagement and understanding.<sup>3,4</sup>

ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

4

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education Research and Development

## Action Research

The diagram illustrates the Action Research cycle and the ASK model. The Action Research cycle is a circular process: Identify the problem and envision success, Develop a plan of action, Collect data, Analyze data and form conclusions, Report the results, and Adjust the theory and begin again. The ASK model is represented by four icons: a question mark labeled 'Wonder', a person reading a book labeled 'Learn', a lightbulb labeled 'Learn', and a funnel labeled 'Analyze'. Below the ASK model, there is a 'Collect' icon showing a person with a clipboard.

ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

5

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education Research and Development

## Types of Projects

Category	Interventions Researched
Group Process & Equity of Participation	<ul style="list-style-type: none"> <li>Methods for "running the room"</li> <li>Assigning roles in the group</li> <li>Assigning student leaders or co-facilitators</li> </ul>
Collaborative Thinking (students & fellows)	<ul style="list-style-type: none"> <li>Purposeful partnering: Think-pair-share, tutoring pairs</li> <li>Facilitating a structured debriefing process</li> <li>Collaboration between fellows when co-teaching</li> </ul>
Assessing Student Thinking	<ul style="list-style-type: none"> <li>Close the laptop method of assessment</li> <li>Using Poll Everywhere technology</li> </ul>
Supporting/Guiding Student Thinking	<ul style="list-style-type: none"> <li>Concept map support for tough science topics</li> <li>Providing and using small groups goals/objectives</li> <li>Using a study guide model for preparation</li> <li>Developing physician vocabulary when reporting</li> <li>Building connections between scientific concepts</li> </ul>

6

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education Research and Development

## Brad Riley, MD - Participant

I asked each student to come to WSG prepared to write one question on the board:

**Inspiration:**

- Prep material
- Clinical rounds
- Anything really

I briefly mentioned it could be based on an ASK model, but did not stress this

We discussed each question at the end of class

ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

7

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education Research and Development

## What I Learned About my Facilitation of Scholar Groups

- This will put you more on the spot, as they will ask all kinds of difficult questions*
- You need to be able to help them find answers*
- Even if you think you have a good idea, it will probably need to be tweaked*

ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

8

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education  
Research and Development

## What I learned during MEET

- Teachers know how to teach, not just what to teach
- Simple ideas can be the best
- Constantly “field test” your ideas and be flexible, to find out what is going to work best for:
  - This leader
  - This group
  - This topic

ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

9

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education  
Research and Development

## Kelly Armstrong, MD - Participant

### How do you run the small group room?

**Background:** Facilitation styles of small group process differs between faculty in our curriculum

**Question:** How does the order or flow of the small group change equity of voice and student talk for small group learning?

- How do different types of organization/facilitation of small group process affect the student experience?

ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

10

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education  
Research and Development

## How did we measure? What did we learn?

- **MEASURE:** Use of an “equity of talk” tool to quantify types of student communication depending on facilitation style (student directed vs faculty directed)
- **LEARN:** students thrived when they are given agency to decide small group routines/structures

ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

11

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education  
Research and Development

## My benefit from MEET participation

- I found new ways to think about small group facilitation from a teacher’s perspective
- I learned about student group dynamics and how individual learning styles are affected by the type of facilitation a group experiences
- I was able to apply my findings to work with other groups
  - Broader perspective on a “toolbox” to use when teaching small groups
  - More awareness of how a group functions based on how I facilitate
  - Better skill at asking students specific questions about how they like to learn as a group

ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

12

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education Research and Development

## Clinician Educators' Development

- Fellows
  - Had opportunities to talk about teaching with other fellows and facilitators & coaches
  - Became more reflective and intentional in their teaching
  - Began “noticing” - making connections between student thinking and instructional practices
  - Learned in and from their teaching

ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

13

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education Research and Development

## References

1. Kennedy, M. M. (2006). Knowledge and vision in teaching. *Journal of Teacher Education*, 57(3), 205-211.
2. Butler, D. L., & Schnellert, L. (2012). Collaborative inquiry in teacher professional development. *Teaching and teacher education*, 28(8), 1206-1220.
3. Burns A, de Silva Joyce H. Teachers' Voices: Explicitly Supporting Reading and Writing in the Classroom. NCELTR; 2005.
4. Mills GE. Action research: A guide for the teacher researcher. Prentice-Hall, Inc., One Lake Street, Upper Saddle River, New Jersey 07458; 2000.

ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

14

Medical Educator – Excellence in Teaching (MEET)

MICHIGAN STATE UNIVERSITY | College of Human Medicine  
Office of Medical Education Research and Development

## Questions?

ADVANCING SCHOLARSHIP, TEACHING, AND LEARNING IN MEDICAL EDUCATION

15