Asking a Question: Diversity in Student Learning Styles

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CAEE — CENTER FOR THE ADVANCEMENT OF ENGINEERING EDUCATION
RESEARCH·LEARNING·TEACHING·DIVERSITY·COMMUNITY

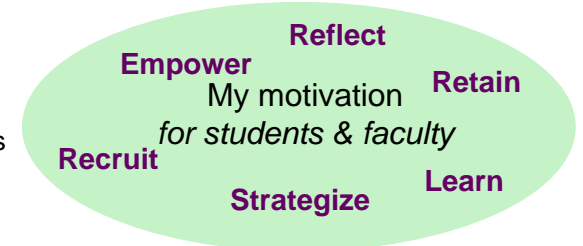MINNESOTA STATE UNIVERSITY MANKATO

Swirling Ideas
Intelligences
Learning Styles
Identity
Gender
Learning Success
Diversity

My Problem:
Wanting to know everything about every question all at once.
If the answer to "life, the universe and everything" is 42,
then we need to work on the question.

Approach
One week crash course
• Theory
• Qualitative & quantitative methods
• Community
Support network after The Week

Reflect
Empower
Retain
My motivation
for students & faculty
Recruit
Strategize
Learn

The story of a research question.
Well, really, more than one question.
But only one researcher...

What I Needed to Learn
You might have a good question in there, BUT
• How do you explain it so that others see your vision?
• How do you expand your idea of approaches?
• How do you narrow down your problem?
• How do you separate multiple factors to get useful data?
Where should I start?

Ask different questions!

Local Impact   Big Picture

Feedback: "I am glad to see that you have narrowed your thinking down to one post it."

What is top priority, i.e., what knowledge will help me address the other questions?

Do potential reviewers understand my terms?

What form will my outcomes take?

What is available in my context?

What is feasible?

What are the right tools?

What is measurable?

What population am I focusing on?

What theory will support & address my question?

Hmmm, will this improve learning?
There's always future work.

Support from Cohort
Implications of results
Literature suggestions
Encouragement
Enthusiasm
Connections to other work
Collaborations
Deadlines!

Quick Research Update
• IRB Approval
• Data collection of learning style data
• About 200 samples from ~8 majors
• Need to do the analysis…
• But! It has already been an effective tool for discussing learning strategies with students

Your Turn
What are your swirling ideas?
What is your question?
Where is your network?
Where will you share your results?