

# QUALITATIVE DATA IN CULTURALLY RICH EVALUATIONS

*Multi-Scale Evaluation in STEM Education*



Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES)

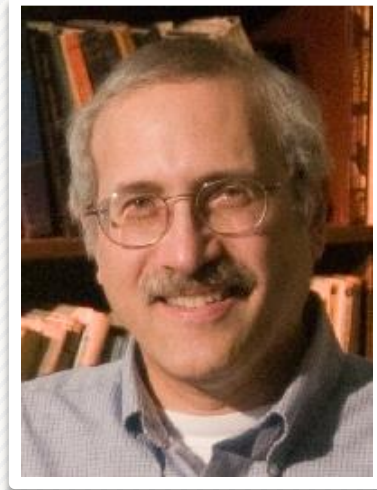


**NIMBioS**  
National Institute for Mathematical  
and Biological Synthesis



**NISER**  
NATIONAL INSTITUTE FOR STEM  
EVALUATION AND RESEARCH

# MEET YOUR MODERATOR



Louis J. Gross, PhD

*Founding Director, NIMBioS*

*Professor of Ecology and Evolutionary Biology and  
Mathematics, University of Tennessee, Knoxville*



# WHO IS THIS PRESENTATION FOR?



Principal  
Investigators  
of NSF Projects



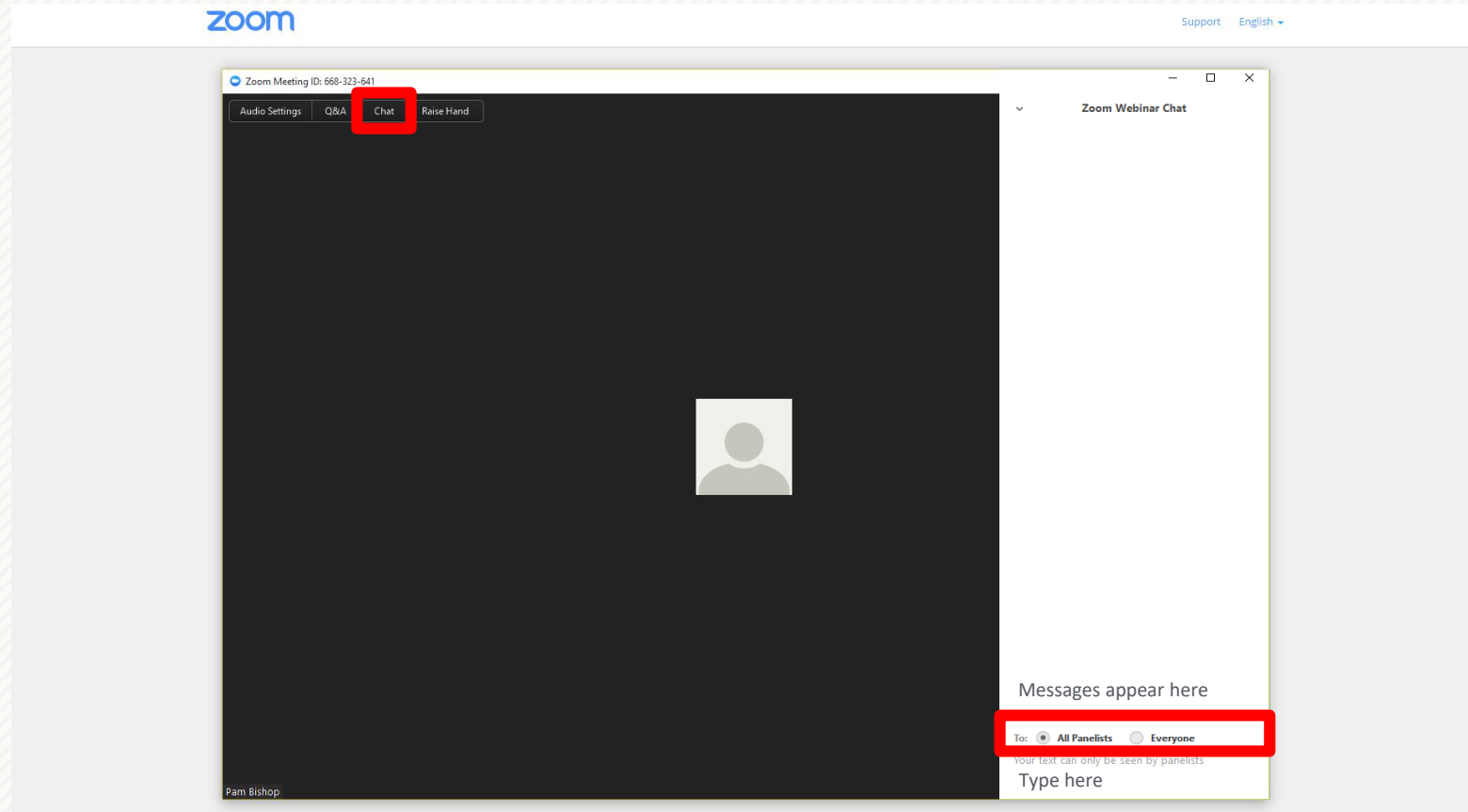
STEM Educators  
planning to submit  
INCLUDES Alliance  
Proposals



STEM Educators and  
Evaluators  
interested in learning  
more about evaluating  
program success



# HOW TO INTERACT TODAY



# MEET YOUR PRESENTER



Sondra LoRe, EdS

*Evaluation Manager  
National Institute for STEM  
Evaluation and Research (NISER)  
sondra@utk.edu*



# • TODAY'S PRESENTATION

- ❖ What is NSF INCLUDES?
- ❖ Qualitative data in culturally rich evaluations
  - ❖ Inform
  - ❖ Insights
  - ❖ Immerse
- ❖ Resources
- ❖ Questions and Comments



THE EVALUATION PROCESS

BY MONTE

# WHAT IS NSF INCLUDES?

- ❖ Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science
- ❖ Three essential components:
  - ❖ Design and Development Launch Pilots (DDLPs)
  - ❖ Alliances
  - ❖ National Network Coordination Hub







# Evaluation and Assessment with Qualitative Data

Evaluation as a celebration of learning.





# What do we mean by QUALITATIVE data?

*Data collected with people using your senses.*

Focus Groups

Interviews

Participant observations

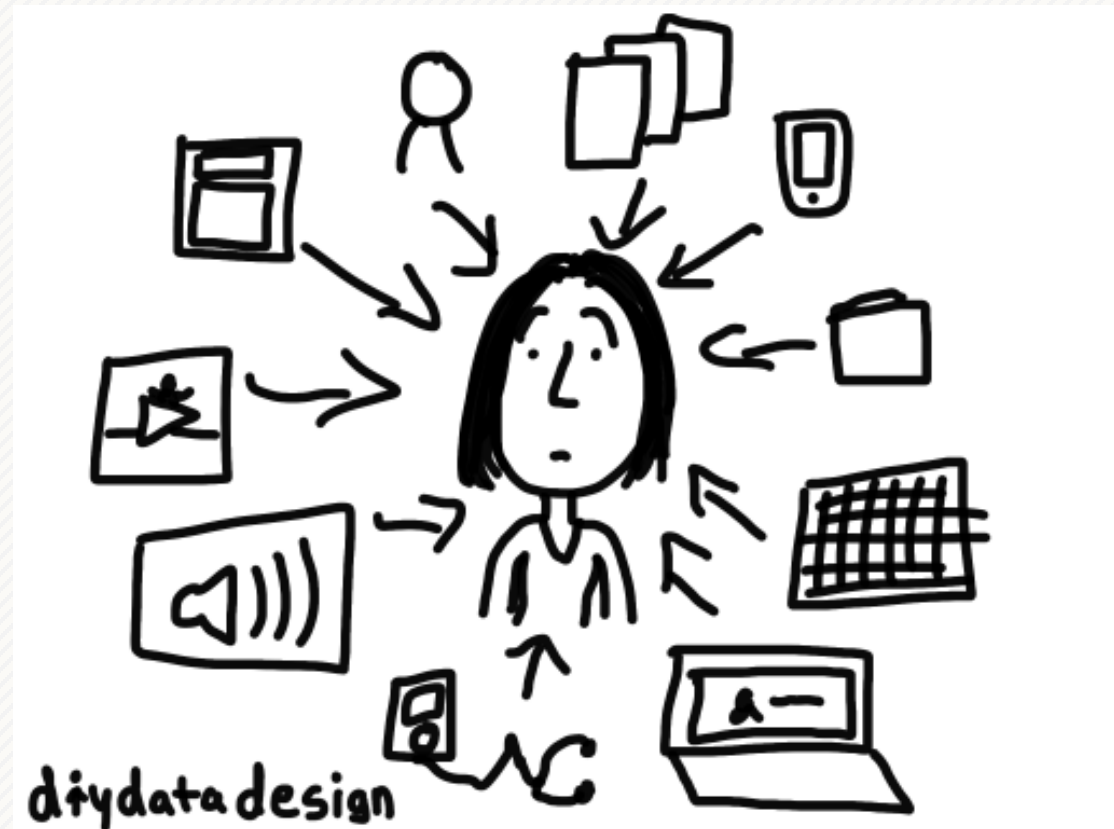
Reflective journaling

Mind mapping

Team meetings

Photo essays

Performance analysis



# Why collect qualitative data for programs?

## The triple I... (plus one more "I")

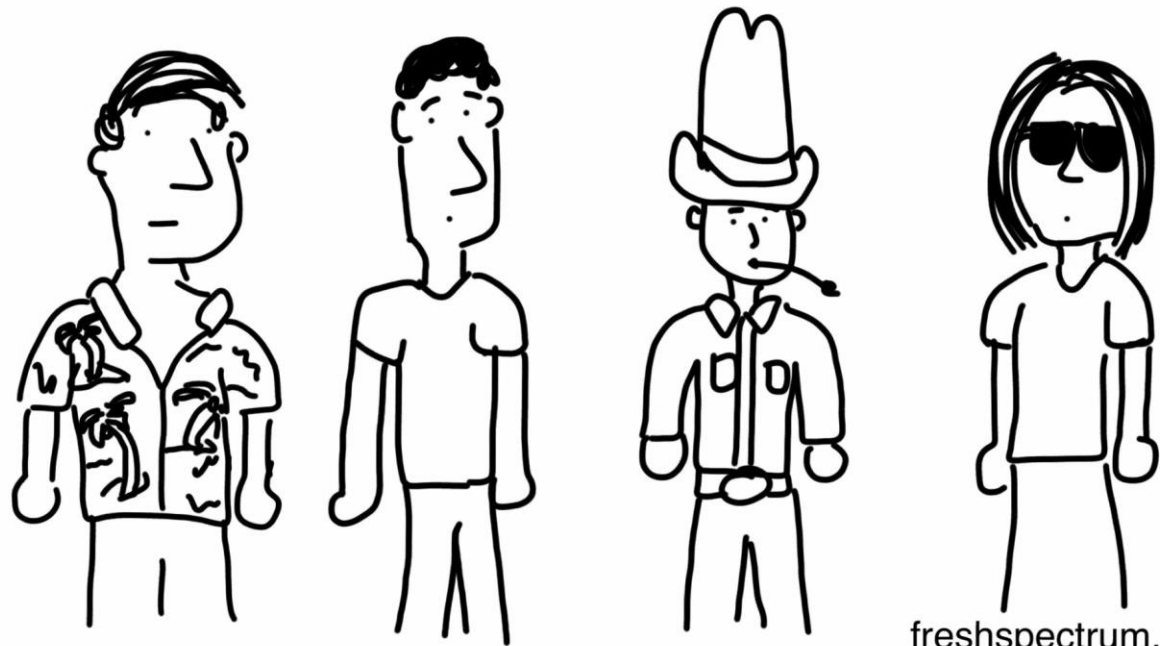
Immerse

Insights

Inform

Plus one more  
"I" = Integrate

We live in different places across the country  
do you really think we're the same audience?



freshspectrum.com

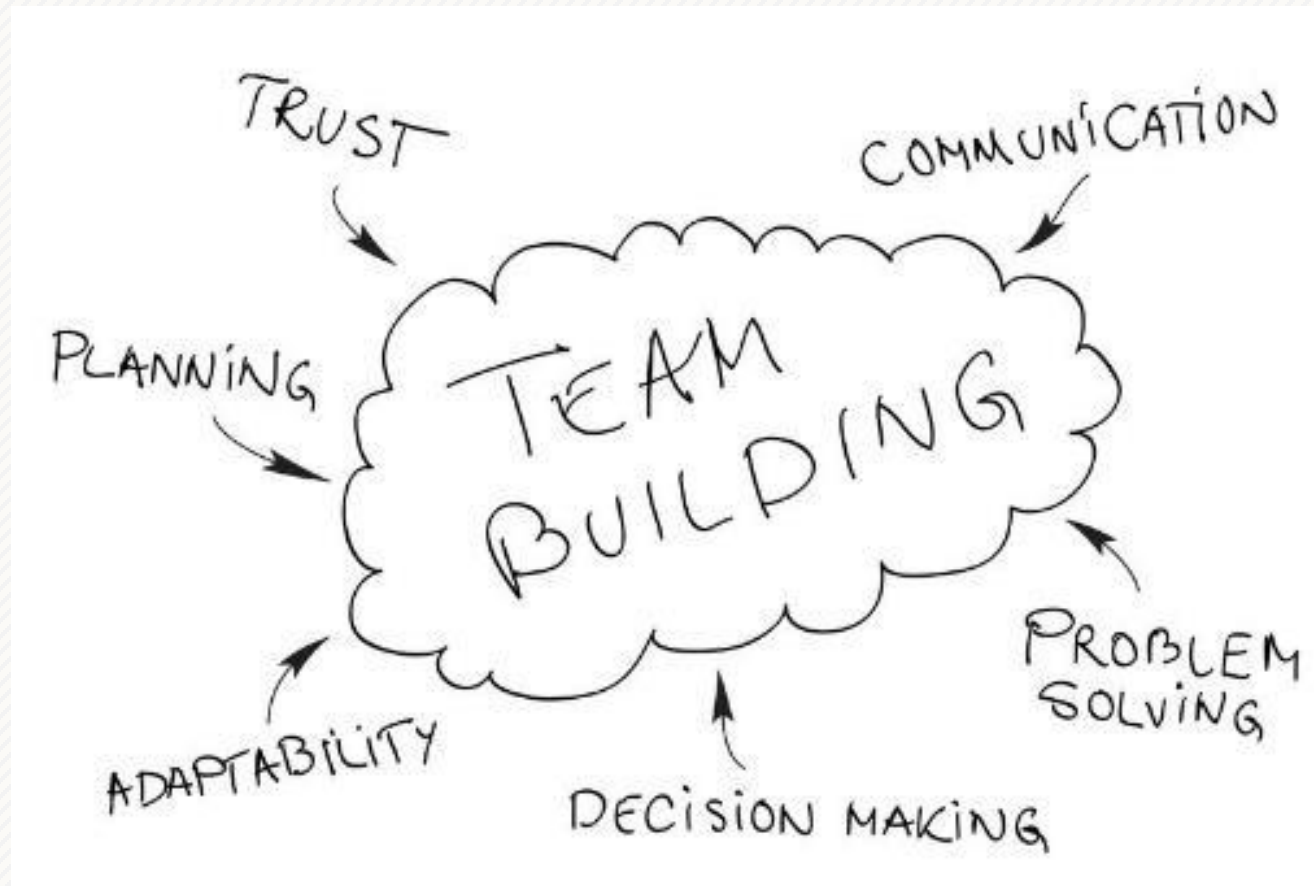
# Immersion

Being –There Experience



*Mind Mapping*

*Establish a culture of transparency and communication*

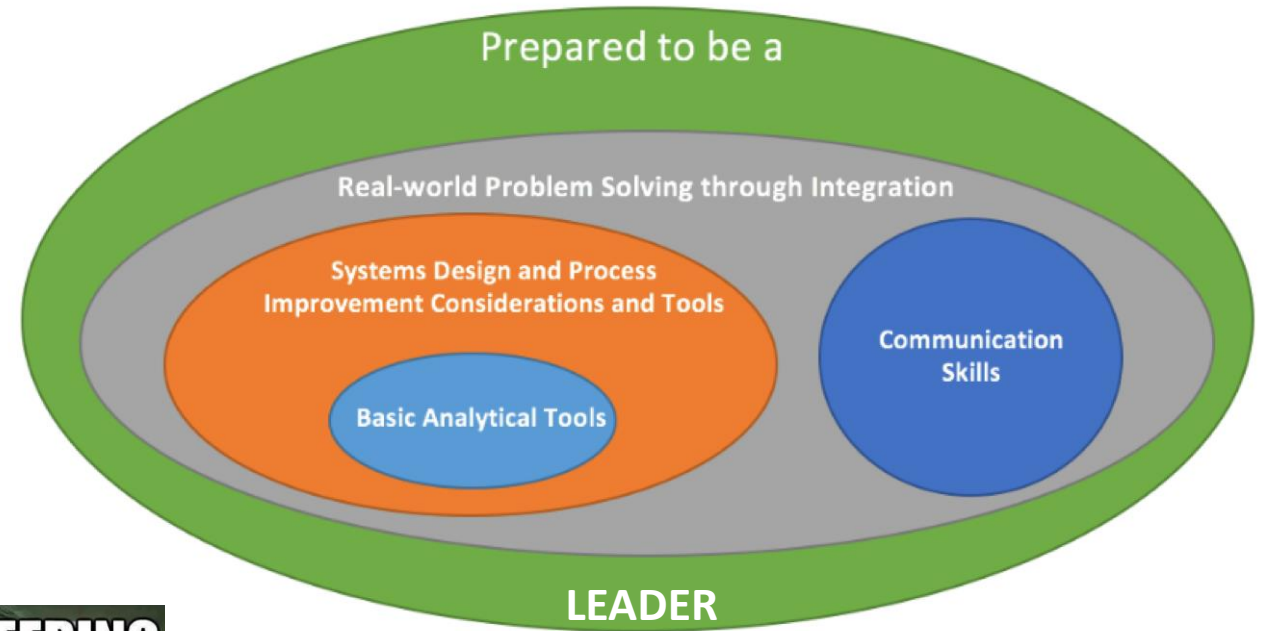
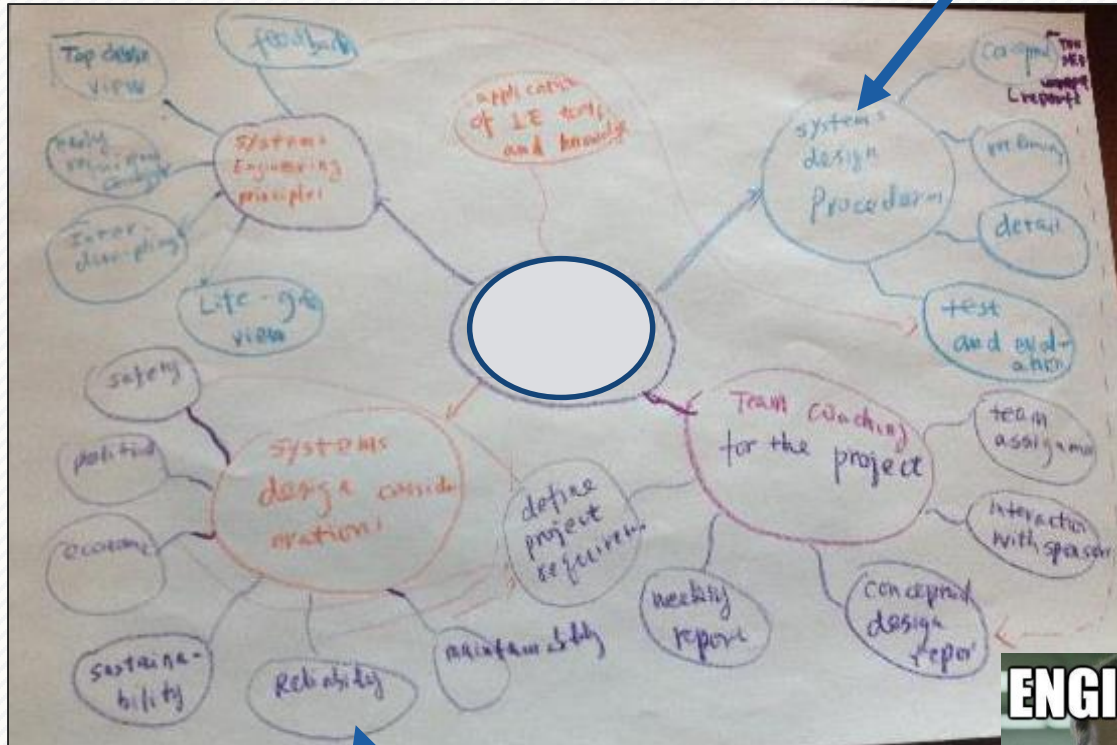


# Immersion

## Mind Mapping



Mission & Vision for the program





# Insights

The people and culture



# Insights

The people and culture

Focus Groups

Board Meeting

Journal writing

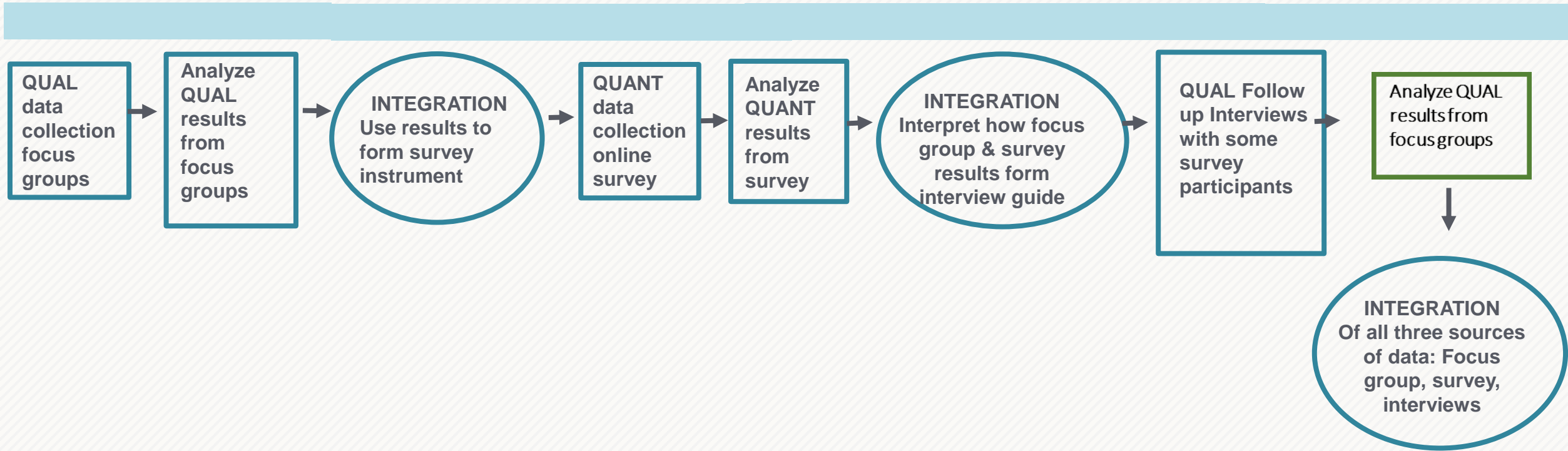
Shared amongst students  
With program leaders  
And evaluators



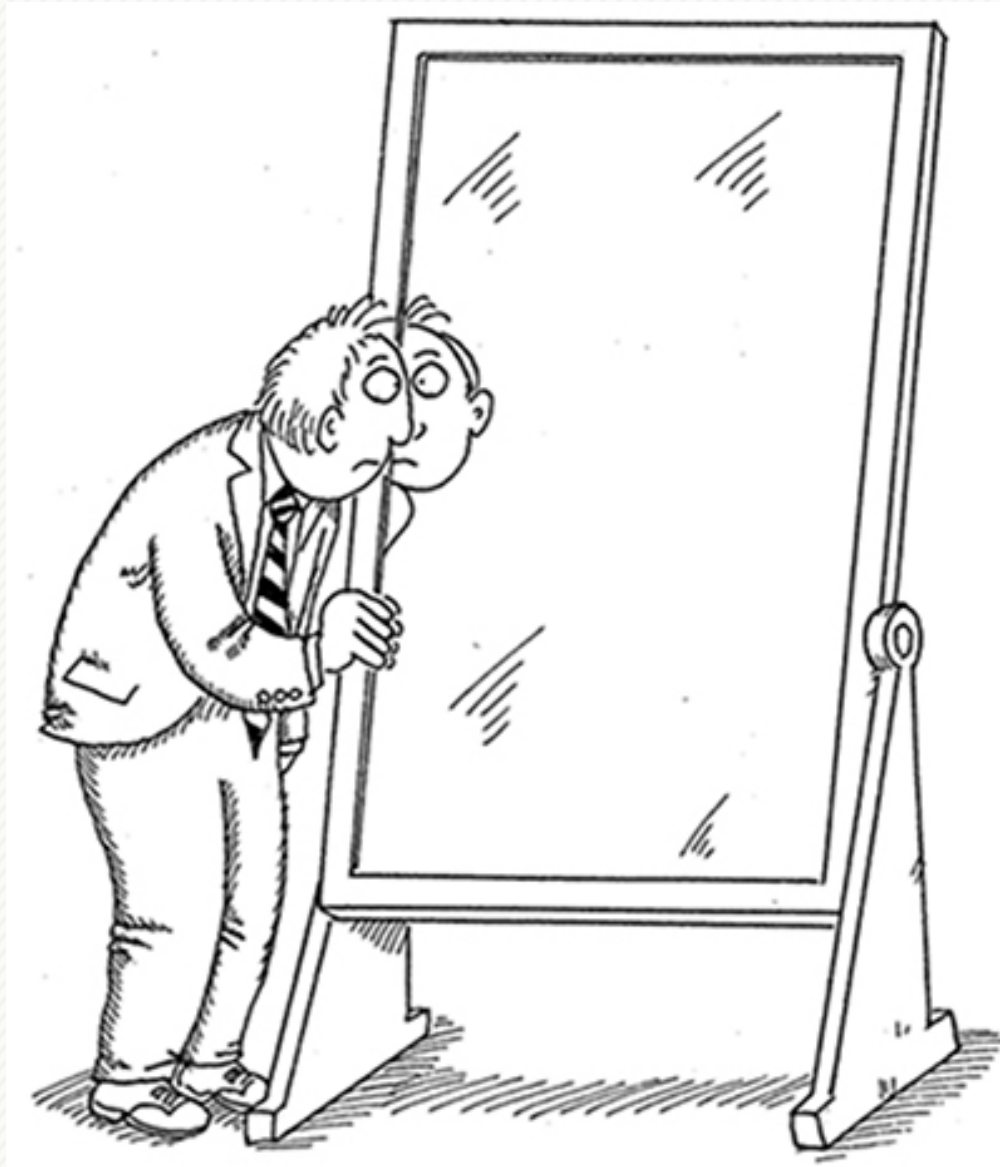


# Inform

Design for assessment and evaluation quantitative measures



Exploratory Sequential Mixed Methods



*“When you ask questions, it reminds me that other people don’t know what we are thinking or what we know about this project.”*

We do not learn from experience...we learn from reflecting on experience.

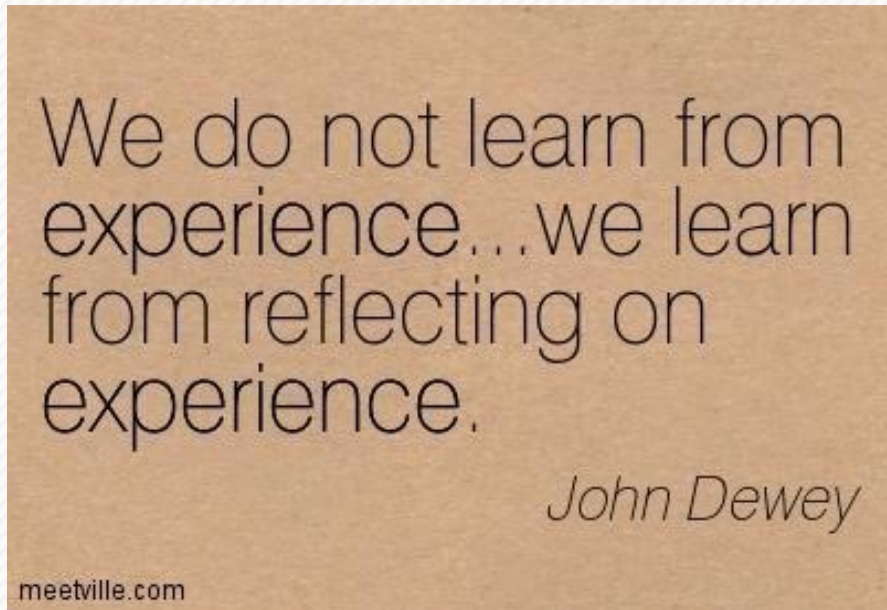
*John Dewey*

“Things feel more **cohesive**. We are talking with each other.”



# Some assembly required

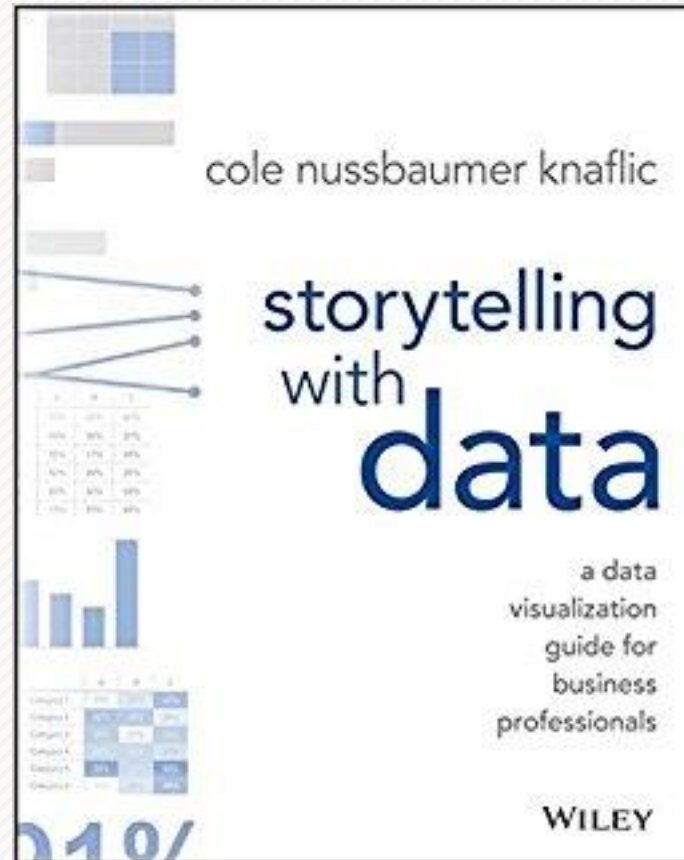
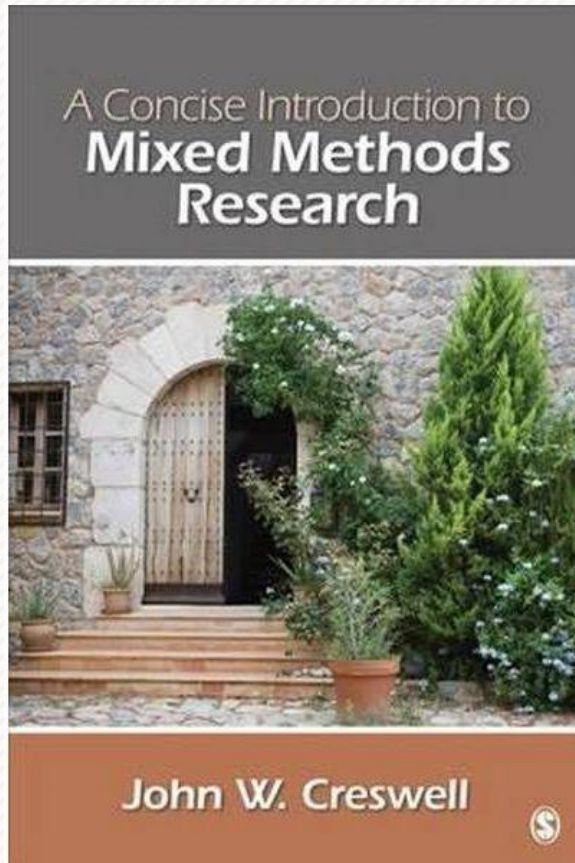
Layering your qualitative data within other data – one more “I” = Integrate



1. Immerse: Being-there experiences  
*Permission to wonder*
2. Insights: Collecting Clues  
*Building understanding*
3. Inform: Assembling meaning  
*Community and Culture*
4. Construction of Knowledge  
*Crystallization*

# Resources

## Layering Qualitative & Quantitative Data in Evaluation Reporting





# Recap: TODAY'S Presentation

- ❖ What is NSF INCLUDES?
- ❖ Qualitative data in culturally rich evaluations
  - ❖ Inform
  - ❖ Insights
  - ❖ Immerse
- ❖ Resources
- ❖ Questions and comments

You say your program works but why should I believe you?



Because I have evidence.



[freshspectrum.com](http://freshspectrum.com)



# HOW TO LEARN MORE

ATTEND OUR NEXT WEBINAR : [www.nimbios.org/IncludesConf](http://www.nimbios.org/IncludesConf)

June 7 Strategies for Measuring the Broader Impacts of NSF INCLUDES Projects

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## NISER Resources



[stemeval.org](http://stemeval.org)



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#NISEReval

## Contact us!



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Thank you!



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