Conducting & Publishing High Quality Teaching & Learning Research

Alex Heckman, Ph.D.
Chair, Department of Public Administration
Franklin University and Urbana University
What This Is

- Focus on fundamentals
- Focus on improvement
- Comparative approach
- Interactive approach
- Acerbic
Workshop Agenda

1. Introduction – 5 minutes
2. Pre-Workshop Survey – 15 minutes
3. Theory – 15 minutes
4. Study Design – 15 minutes
5. Publishing 15 minutes
6. Q&A 15 minutes
7. Post-Workshop Survey – 10 minutes
Straw Person Typical Study

• Change in course/assignment
• Examine course evaluations and/or grades
• Instructor reflection
Enhancing Your Research: Literature & Theory
Know the Literature

1. Similar studies
2. Methods
3. Broader implications
Know Your Learning Theory

1. Guide for developing questions
2. Basis for hypotheses
3. Insights into measuring impact
4. Contributing to the conversation
Enhancing Your Research: Study Design
Comparing is good... and tasty

Before vs. After
Group vs. Group

Image Source:
https://rohan7things.wordpress.com/2013/08/20/5-reasons-you-shouldnt-compare-yourself-to-others/
Design Questions?
6 Easy Steps to Publishing

1. Do a quality study

2. Know your journals
   A. Relevance/Fit
   B. Quality/Influence

Relevance/Fit

- Aligned with articles published in the journal
- Consistent with the journal’s scope, aim, and editorial statements
- Methodological tendencies
- Conform to the instructions to authors
- Write for target audience
Scholarliness & Influence

The h5-Index
(scholar.google.com)

• Measure of influence for articles published in the last 5 complete years

• The larger the better
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<th>h5-index</th>
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Scholarliness & Influence

Journal Citation Reports
jcr.clarivate.com/JCRHomePageAction.action?

• More scholarly and prestigious

• Larger is better
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6 Easy Steps to Publishing

3. Adapt your article
4. Proofread, revise, repeat
5. Address reviewer comments
6. Systematically explain & justify
Q & A
Resources

Learning Theory Resources

Learning-Theories.com:  www.learning-theories.com/
Instructional Design:  www.instructionaldesign.org/theories/

Assessment Resources

http://ctl.utexas.edu/teaching/assess-learning/methods-overview
www-tc.pbs.org/teacherline/courses/inst325/docs/inst325_stiggins.pdf
www.cmu.edu/teaching/assessment/assesslearning/CATs.html
What is an H–index and how is it calculated?
https://theconversation.com/explainer-what-is-an-h-index-and-how-is-it-calculated-41162

Instructional Design: www.instructionaldesign.org/theories/

Assessment Resources
http://ctl.utexas.edu/teaching/assess-learning/methods-overview
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www.cmu.edu/teaching/assessment/assesslearning/CATs.html
Some Learning Theories

- Behaviorist
- Cognitivist
- Constructivist
Pedagogy

• Bringing learning to life

• Helping learners transform
Hypotheses:
Research Questions

Good research questions are:

• Relevant
• Manageable
• Substantial and original
• Able to be assessed
• Clear and simple
• Interesting
Why Assess?

• “Are we teaching what we think we are teaching?’

• ‘Are students learning what they need to learn?”

[Cartoon image of a discussion between characters where one character says, “I taught Stripe how to whistle,” and the others respond with confusion.]
How to Assess?

• Formative (low-stakes): Takes place during the learning process

• Summative (high-stakes): Takes place at the end of an instructional unit
Our Questions

A. What is the impact of the workshop on participant’s understanding and confidence of how to conduct and publish high quality teaching and learning research?

B. What is the impact of the workshop on participant’s success rate in publishing teaching and learning research in a peer-reviewed journal?

C. What is the relationship between participants’ attitudes and beliefs about what was learned in the workshop, what they actually learned, and the impact on successful publishing?

Questions for you:
What theory or theories inform these questions?
How could we assess?