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# Is Your Research Valid?: Reflections on the Institute on Research Design in Librarianship

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# Is Your Research Valid?



Reflections on the  
Institute on Research Design in Librarianship

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University of Oregon

# Agenda

- IRDL program goals
- Research Methods basics
- Creating a strong application
- Data exercise

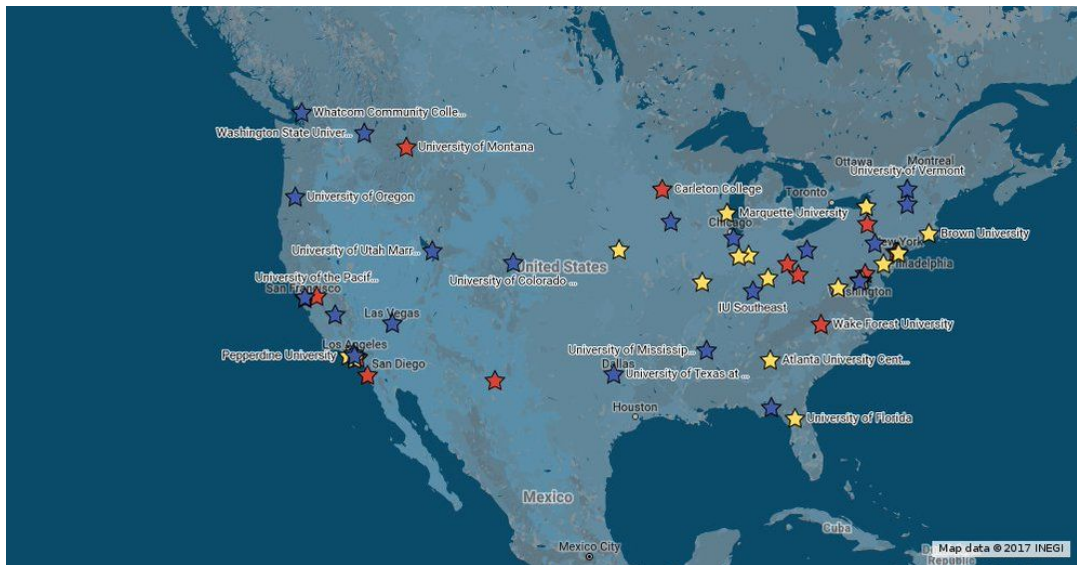
# What is IRDL?



# State of LIS Research

Unfortunately, a significant amount of library research is methodologically unsound.

# Research Communities: The Cohort Experience



21 Scholar Librarians from across the nation, located in all types of academic institutions and in various stages of their careers.

**Completely funded** for selected participants.

# Instructional Team: Greg Guest

Applied anthropologist

- Expert in designing and managing large, multi-site, research and evaluation initiatives
- Published multiple methods textbooks



## Instructional Team: Lili Luo

Associate Professor at San Jose State University

- Expert in digital reference service, information seeking and use, and LIS education
- Research Methods Expert





# Instructional Team: Emily Namey *aka “My Colleague Emily”*

Applied anthropologist with expertise in:

- Mixed methods research design
- Qualitative data collection & analysis
- Evaluation research
- Protocol & instrument development



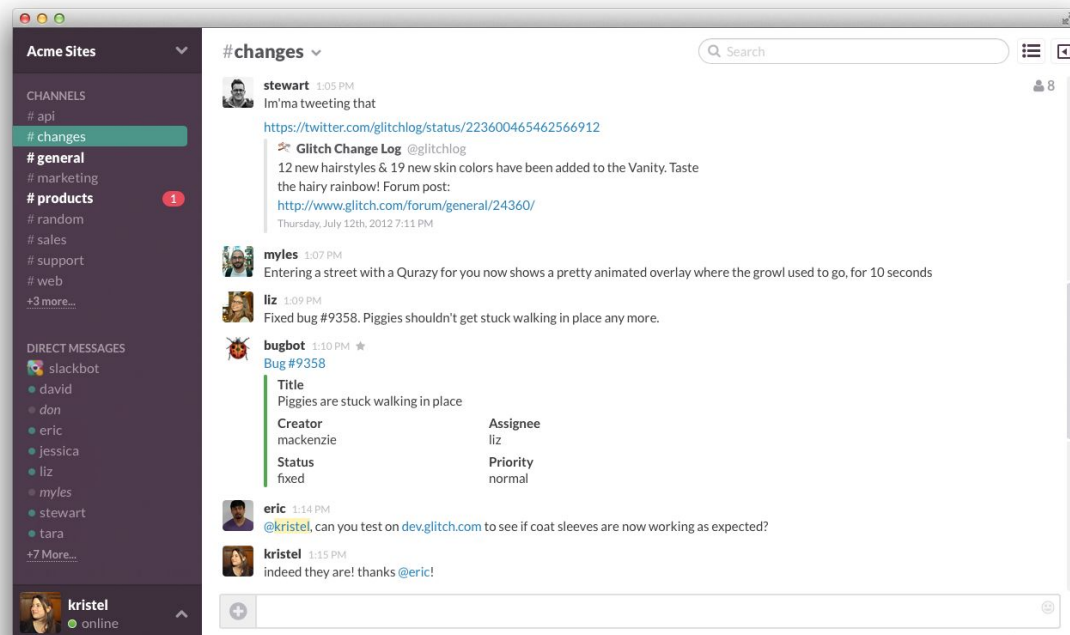
# Instructional Team: Michael Stephens

Assistant Professor at San Jose State University

- Research focuses on the use of emerging technologies in libraries and technology learning programs



# Learning Communities and Research Networks



Slack

Facebook

Twitter

BlackBoard

# Personal Learning Network

is a **network** set up by an **individual** specifically in the context of their **professional activities** through **online platforms** to support their professional **non–formal learning needs**.

Therefore, a professional who intentionally **builds, maintains and activates** their strong, weak and very weak **ties with contacts** within their personal network for the purpose of **improving her learning** — and uses **technology to support** this activity — is creating a personal learning network.

# (Re)Introduction to Research Methods

# Designing a Research Project

1. Research Problem > objective > hip question
2. Deliverable-content and structure
3. Type of Research Design
4. Methods to be used
5. Sampling strategy
6. Cost, time and other logistics
7. Review and Revise
8. Rinse and Repeat

# Developing a Research Goal

- Begins something like “The purpose/goal of this study/project...”
- Can range in breadth, scope and detail – the narrower, the easier to design and execute!
- Falls under the overall goal or aim (typically one sentence long.)
- Begins with “To [research verb here...]”

## Common verbs

- Identify (qual)
- Explore (qual)
- Describe (qual)
- Explain (qual)
- Compare (qual)
- Assess (qual)
- Evaluate (qual)
- Measure (quant) or Test (quant)

**Research Questions:** Begin with What? How? Why? etc.

**Hypotheses/Statements:** Begin with “We expect or hypothesize that...”

- **Directional** predicts a relationship, as well as the direction of a relationship
- **Non-directional** predicts a relationship, no direction assumed



# Developing a Research Question

- Can the research question hold my interest?
- Can the research question pass the “so what” test?
- Is the research question well-grounded in existing research?
- Are all the terms in the research question unambiguous and operationally definable?
- Is the research question empirically answerable?
- Is answering the research question feasible, given the constraint of time, budget, expertise, staffing, and ethics?

# Why IRB?

IRB protects:

- participants safety and confidentiality
- Researchers
- and Research Institutions (safety from bad press, lawsuits and other actions)

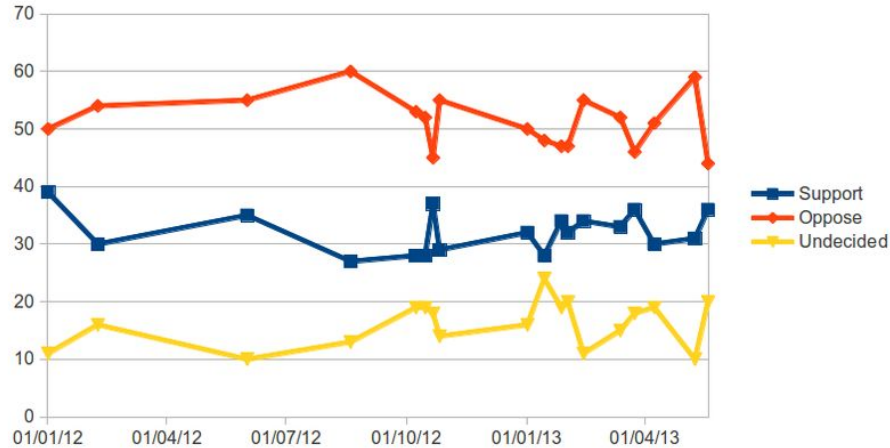
Each institution will have their own access to IRB training and approval process for studies

# Qualitative Methods



1. Focus Groups
2. Interviews
3. Document Analysis
4. Observations
5. [Mixed Methods](#)

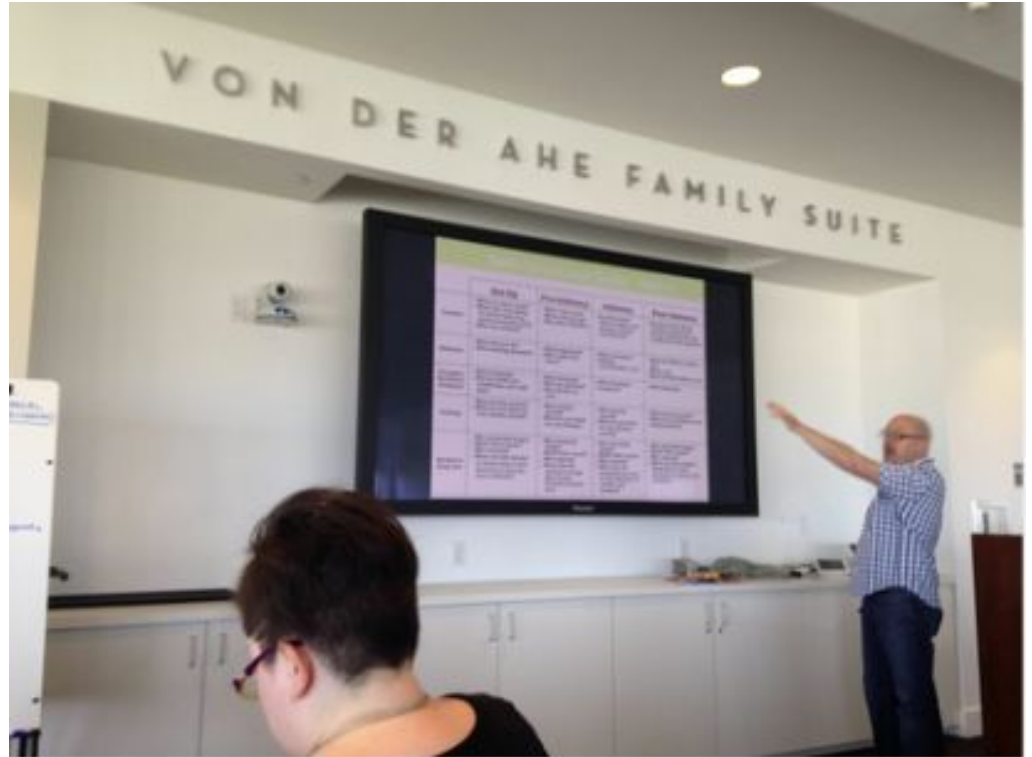
# Quantitative Methods



1. Surveys
2. Polls
3. Questionnaires
4. Analysis of pre-existing statistical data
5. Mixed Methods

# Data Collection Instruments

1. In-Depth Interviews
2. Surveys



# Analysis Tools

<b>Software</b>	<b>Application</b>	<b>Free</b>
Atlas.ti	Qualitative	NO
Dedoose	Qualitative	NO
NVivo	Qualitative	NO
RQDA	Qualitative	YES
SAS	Quantitative	NO
SPSS	Quantitative	NO
STATA	Quantitative	NO
R	Quantitative	YES

# Methods of Analysis

Framework	Description
Inductive Probing	Exploratory research
Inductive Thematic Analysis	Requires coding of emergent themes
Deductive Probing	Confirmatory questions to arrive at answer
Deductive Analysis	Codes are defined before analysis
Grounded Theory	Systematic and exhaustive comparison of text segments to build thematic structure

# Qualitative Coding Keywords

- Codes:
  - Themes, concepts, keywords, etc.
- Creating Codes:
  - Pre-set Codes
  - Emergent Codes
- Intercoder reliability (agreement)
- Data Reduction Techniques



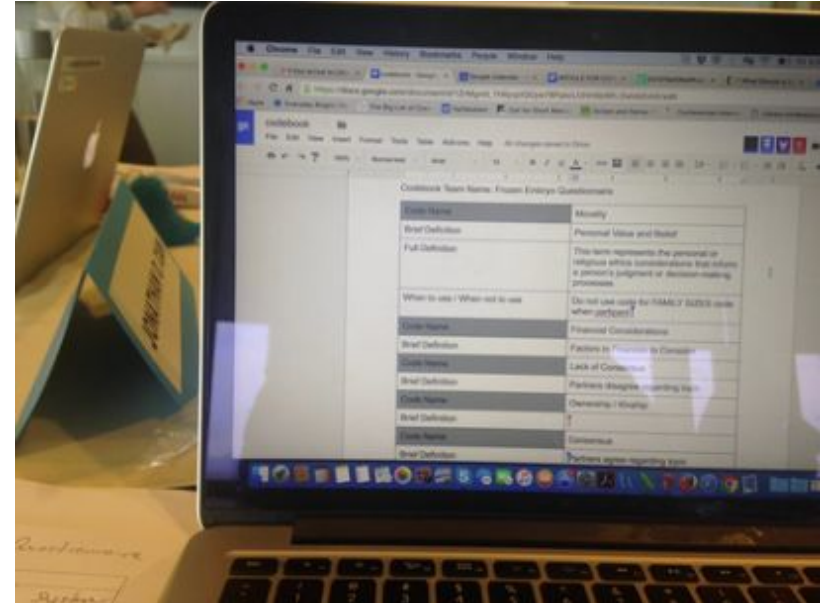
# Qualitative Analysis: Determining Validity

## Qualitative Sample Sizes to achieve saturation

- 12 interviews = saturated themes
  - Source: doi:10.1177/1525822X05279903
- For multi-site, cross-cultural studies, 20-40 interviews
  - Source: doi:10.1177/1525822X16640447
- 80% of themes found in 2-3 focus groups, 90% in 3-6 focus groups
  - Source: doi:10.1177/1525822X16639015

# Let's Code!

1. Form small teams (2-5 people)
2. Review the interview transcript
3. Create a codebook with your team



## Coding Debrief

How easy or difficult did you find the coding exercise?

Did you find yourself mostly in agreement with your team?

If not, why?

Would you feel comfortable that you were all interpreting the text in the same ways?

How do you think you could improve?

# Our Current Projects

**Jonathan**

*The Research Cycle & Data  
Management Practices of  
Primary Investigators*

Status: **In data collection  
phase**

**Tatiana**

*Gender Identity &  
Performance in Librarianship*

Status: **In data analysis  
phase**

# Applying to IRDL

- Funded Again
- Eligibility?
- What Makes a Good Application?

## Eligibility

- Applicants must have already completed a graduate program in library and information studies or equivalent (completed by May 2016 or earlier)
- Applicants must be employed in a single, full-time permanent position as an academic or research librarian in the United States
- Persons in residency programs or time-limited positions are not eligible for IRDL
- Applicants must be able to attend the entire summer workshop in LA

# What makes a Good Application?

- A unique research question
- A demonstrated interest in research
- Support from your Dean to commit to a year-long research project
  - Research time
  - Access to Research Support Services (ie analysis software, data analysis expert)
- A commitment to participate in monthly check-ins
  - Web conferences & surveys

# #IRDL

# #IRD L2015

# #IRD2016

@IRDOnline





# Papers & Presentations

[Produced by the Research Team](#)

[Produced by IRDL Scholars](#)

Have Questions?  
Contact Us!

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thank you