

# ***Multiple Methodologies for Space Assessment to Support Learning***

Karen R. Diller  
Sue F. Phelps  
Washington State University,  
Vancouver, WA

# *Outline*

Brief history of space studies

Methods & Results

- Mapping
- Focus Groups & Surveys
- Photo Survey
- Structured Interviews

Where we go from here



# ***Space Studies: A brief history of almost everything***

- Bennet (2003) & Demas (2005)  
Library place as learning space
- Lewis (2007)  
Places to create knowledge
- McHarg, et al. (2006)  
Importance of physical library
- Cataldo (2006) & Lewellen (2006)  
Multiple methods, qualitative & quantitative

# ***Space Studies: A brief history of almost everything***

- Potthoff (2007)
  - Role Repertory Grid Procedure
- Cohens – Architects (2005)
  - Need to understand human interaction and behavior
- Webb (2008)
  - Surveys, video study, NSSE

# ***Space Studies: A brief history of almost everything***

- Crumpton & Crowe (2008)  
Surveys, observations, focus groups
- Foster & Gibbons (2007)  
Anthropological study
- Jordan, et al.  
Surveys, maps, focus groups
- Suarez (2007)  
Ethnographic methods

# ***Mixed Method Research***

- Bryman's reasons for using mixed-methods

Validity/Triangulation

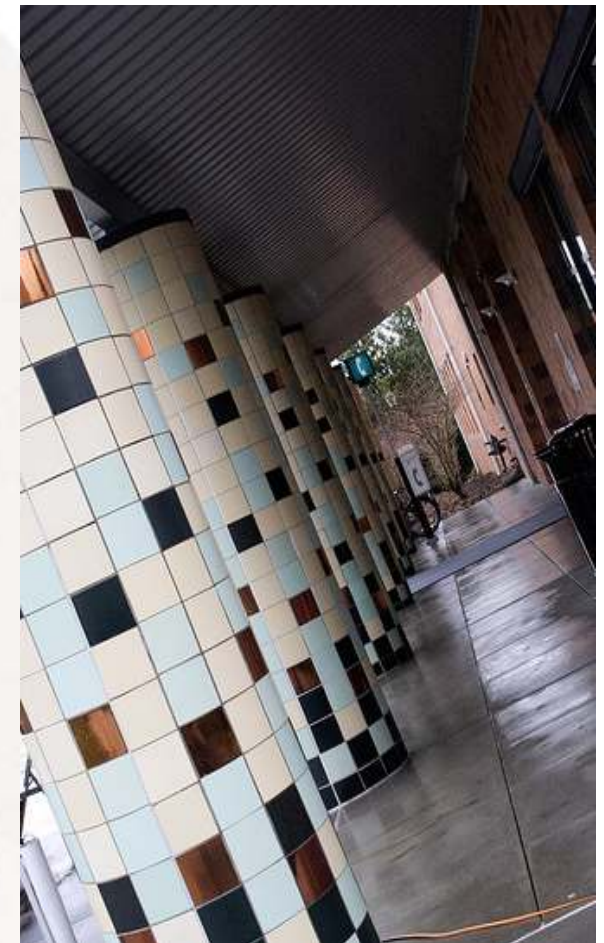
Credibility

Offset Weaknesses

Completeness

Instrument Development

# ***WSU Vancouver Library***



Library Assessment Conference, Oct 2010

# ***Focus Groups***

## **Advantages**

- Yields more detailed data
- Clarify questions
- Good for pre-testing topics

## **Disadvantages**

- Need skilled facilitator
- Time consuming to organize, transcribe, code, & analyze



# *Surveys*

## Advantages

- Conducive to large samples
- Wide range of topics
- Inexpensive
- Easy to analyze

## Disadvantages

- Self-report bias
- Not in-depth or in-context
- Questions difficult to write

# *Results*



Library Assessment Conference, Oct 2010

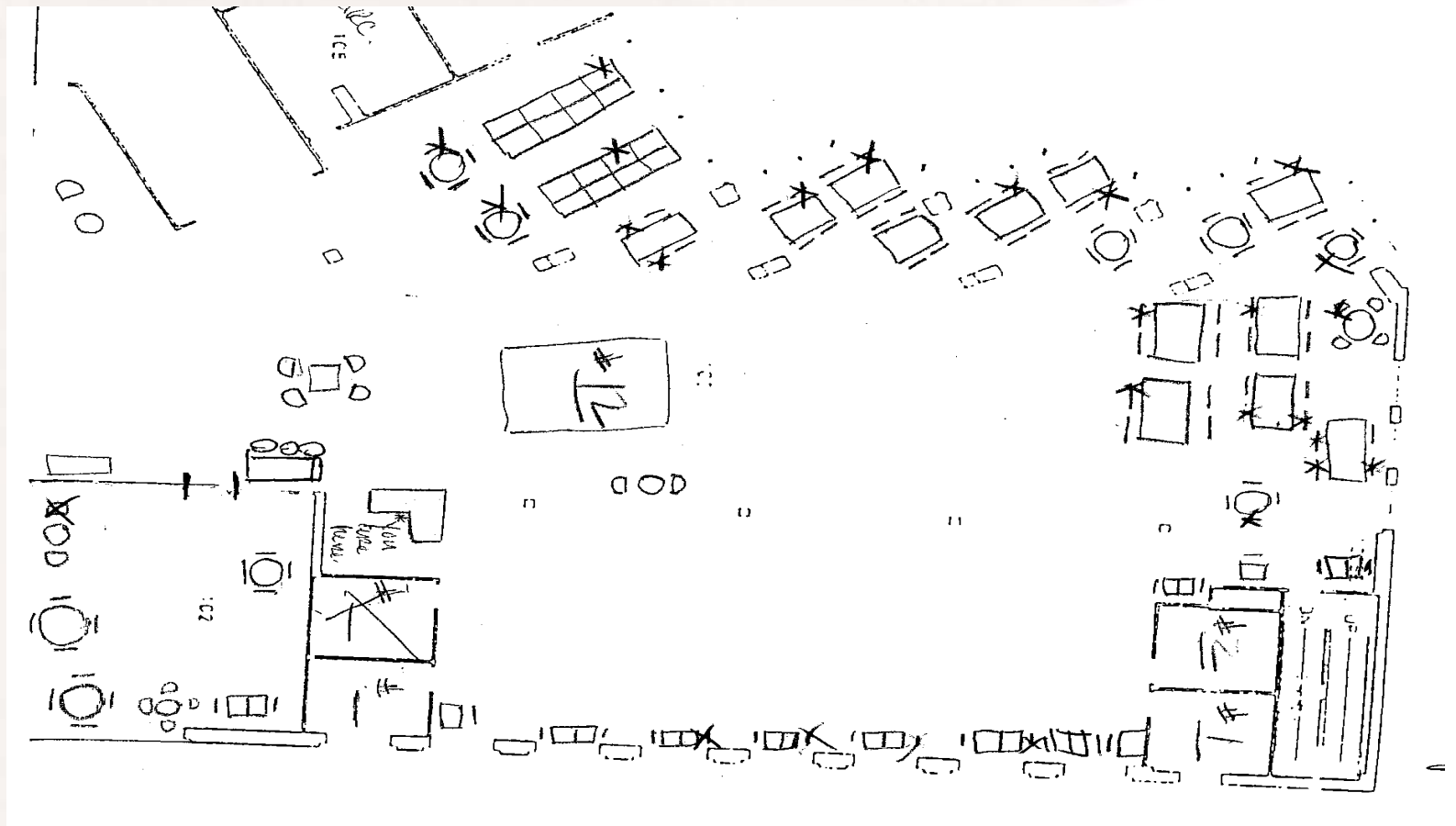
# ***Observational Studies***

- Allows for unanticipated outcomes
- Could be costly & time-consuming
- Requires more training
- Demands objectivity of observer
- Direct information about behavior
- Behavior at time of observation may be atypical

# *Mapping Survey*

- Xia (2005) using Geographic Information System (GIS)
- Measure use of each study area over time
- Works only when users have a choice of where to sit

# Mapping Survey @ WSUV



Library Assessment Conference, Oct 2010

# Results



# Results

## Seating Preference at Rectangular Tables

Occupied Seats	
Place	Preference
Carrel	20%
Rect. Table	36%
Round Table	14%
Workstations	9%
Group Rooms	12%
Lounge Chairs	9%

Place	Preference
Across	31%
Beside	65%
Diagonal	4%

## # of People in Group Rooms

1 person	39%
2 people	35%
3 people	17%
4 people	7%
5 people	1%
6 people	1 %

# *Photo Survey*

- Improved understanding of context
- Can be analyzed quantitatively or qualitatively or both
- Subjectivity of photographer
- Subjectivity of interpreter



# *Photo Survey*



	Lamp Library	Table lib	outdoor table	outdoor lamp	Other lamp	Other table
Reading	II		II	I	II	III
Knapping Station	I		I		III	I
Activity Study	I	2000 2025			I+15	37+1
Scrubbing	I		II	III	I	II
Calligraphy DP			I	I		
Eating					II	
Other Signage	II	I				I

# ***“Hi-Tech” Method of Quantitative Analysis***

# ***Structured Interviews***

## **Advantages**

- Ask clarifying questions
- More flexibility
- More complex data
- Interview while in study space

## **Disadvantages**

- Takes more time
- Interviewers need to be trained
- Volume of data
- Interviewee may try to please

# *Results*

- For groups, it is important to have private space (97%) and important to have plugins for laptop use (82%).
- For individuals, the two most important attributes to study space are a window with a view (52%) and the type of seating (49%).

# *Where do we go from here? The WSUV Story*

- Consolidate the data results into a report for the Director and the Library.
- Make minor changes immediately.
- Use parts of report in annual budget deliberations.
- Use information in planning process for remodel.

# ***Where do we go from here? The Profession***

- Need to move away from self-reporting of what patrons like.
- Need to use more authentic methods of understanding human behavior.
- Need to draw on methods from other disciplines.
- Roberts & Weaver (2008)

# *Question of the Hour*

How do we determine what spaces are truly conducive to student learning?



***The End***



Karen R. Diller  
diller@vancouver.wsu.edu

Sue F. Phelps  
asphelps@vancouver.wsu.edu

Library Assessment Conference, Oct 2010