

# Embedding Librarians in Undergraduate Research Methods Classrooms for Student Success

Faith A. Rusk, University of the District of Columbia

Suzan J. Harkness, Notre Dame of Maryland University

Ramon Rubio, University of the District of Columbia

# Institutional Context

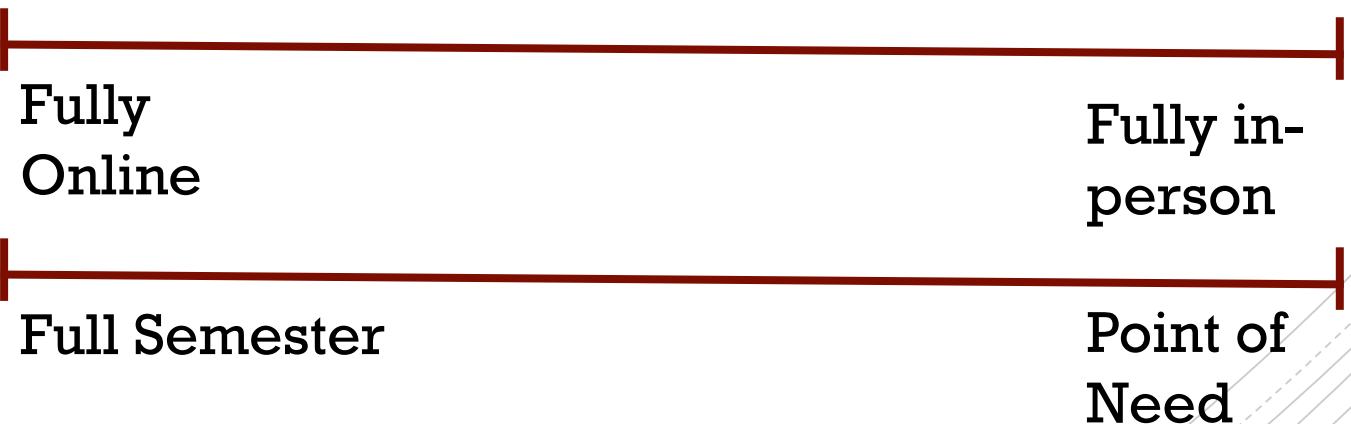
- **About Us**
  - Created in 1975, with predecessor institutions dating back to 1851
  - Only public university in the District of Columbia
  - Both an HBCU and an urban land grant college
  - About 75 undergraduate and graduate degree programs
  - Current FTE is about 4,000 students
  - Very diverse student body
- **About our library**
  - Three reference librarians conduct instruction and provide reference
  - Librarians staff the Reference Desk

## Definitions

# What do we mean by embedding?

- Based on the idea that information literacy is best taught within the course work and more than one time (Walton and Hepworth 2012).
- Not a new term. Has existed since the 70s (Kesselman and Watstein 2009; Summey and Kane 2017)
- Can mean many different things

## Spectrums of Embedding



# Survey

- Who is interested in starting an embedded initiative?
- Who has participated in an embedded initiative before?
  - Of those people, who thought it was successful?
  - Who thought it was not?
  - Who thought it was just a LOT of work?
- Who has provided library instruction for a Research Methods class?

# Why Research Methods Matters

- How does the Research Methods class differ from any other class where students are finding, evaluating and using sources to support their work?
- Discovery vs. Research
- Synthesizing Sources
- **How** will you answer this research question?
- Searching for theory
  
- Research paper ≠ Research project

# Origin Story

## Timeline:

- Dec. 4: Request form submitted
- Dec. 8: Initial meeting
- Jan 5: follow up meeting
- Jan 9: Classes begin
- Jan 18: Control One shot session
- January 25: Embedded Section Research Question Class
- Feb 1: Embedded Section Literature Review Class
- March 20: Embedded Section Theory Class
- May 15: Professor Harkness Received FIRG Grant to fund summer work
- June: Review prep – revising rubrics, establishing definitions
- July 27: Full case review to establish IRR
- Aug. 3 – Aug. 21: Artifact Review

## Structure

- One in-person one shot class as a control for both sessions:
  - Covered navigating the library website, database searching, accessing and requesting articles.
- Three areas to cover with **point of need** in-person instruction:
  - Research Questions
  - Literature Reviews
  - Theory

# Structure

- **Pre/Post Test**
- **Course Assessment Report**
- **Blind review of 3 artifacts:**
  - **Literature Review**
  - **Theory Section**
  - **Final Research Proposal**
- **Librarian Contact Log**

Research  
Questions  
Instruction  
Session

Integral component.

Because they are conducting the research,  
they have to consider things they haven't  
considered before.



## Brainstorming Activity

## Research Question Framing

### What?

- . What is your topic? What other issues/events are similar or related to your topic?

### Who?

- . Who is affected by your topic? Who is involved?

### How?

- . How does your topic impact society, culture, politics, economics?

### Why?

- . Why does this topic matter to you? Why should it matter to others?

I want to look at how \_\_\_\_\_  
could impact/effect \_\_\_\_\_

I want to know what the role  
of \_\_\_\_\_ is in relationship to  
\_\_\_\_\_

I want to examine a specific population (age  
range/location/race/ethnicity) \_\_\_\_\_  
\_\_\_\_\_

I can measure this using  
\_\_\_\_\_

My Research  
Question: \_\_\_\_\_

# Literature Review

- **Common Problem: Annotated Bibliography as Literature Review**
- **Mitigate with:**
  - A comparison activity
  - Burke's Parlor Analogy
  - Synthesis Activity (Venn Diagram)

# Annotated Bibliography vs. Literature Review

## Annotated Bibliography vs. Literature Review

	Annotated Bibliography	Literature Review
<b>Characteristic</b>		
Summarizes and analyzes the information gathered from different sources		
Information from different sources are analyzed together, examining the relationship between them		
Sources are analyzed individually		
Each source appears only once		
Sources may be references multiple times		
Written in the style of an expository essay		

## Burke's Parlor

Burke's parlor:

Imagine that you enter a parlor. You come late. When you arrive, others have long preceded you, and they are engaged in a heated discussion, a discussion too heated for them to pause and tell you exactly what it is about. In fact, the discussion had already begun long before any of them got there, so that no one present is qualified to retrace for you all the steps that had gone before.

You listen for a while, until you decide that you have caught the tenor of the argument; then you put in your oar. Someone answers; you answer him; another comes to your defense; another aligns himself against you, to either the embarrassment or gratification of your opponent, depending upon the quality of your ally's assistance. However, the discussion is interminable. The hour grows late, you must depart. And you do depart, with the discussion still vigorously in progress. (Burke, 1941)

## Synthesis with OpEds

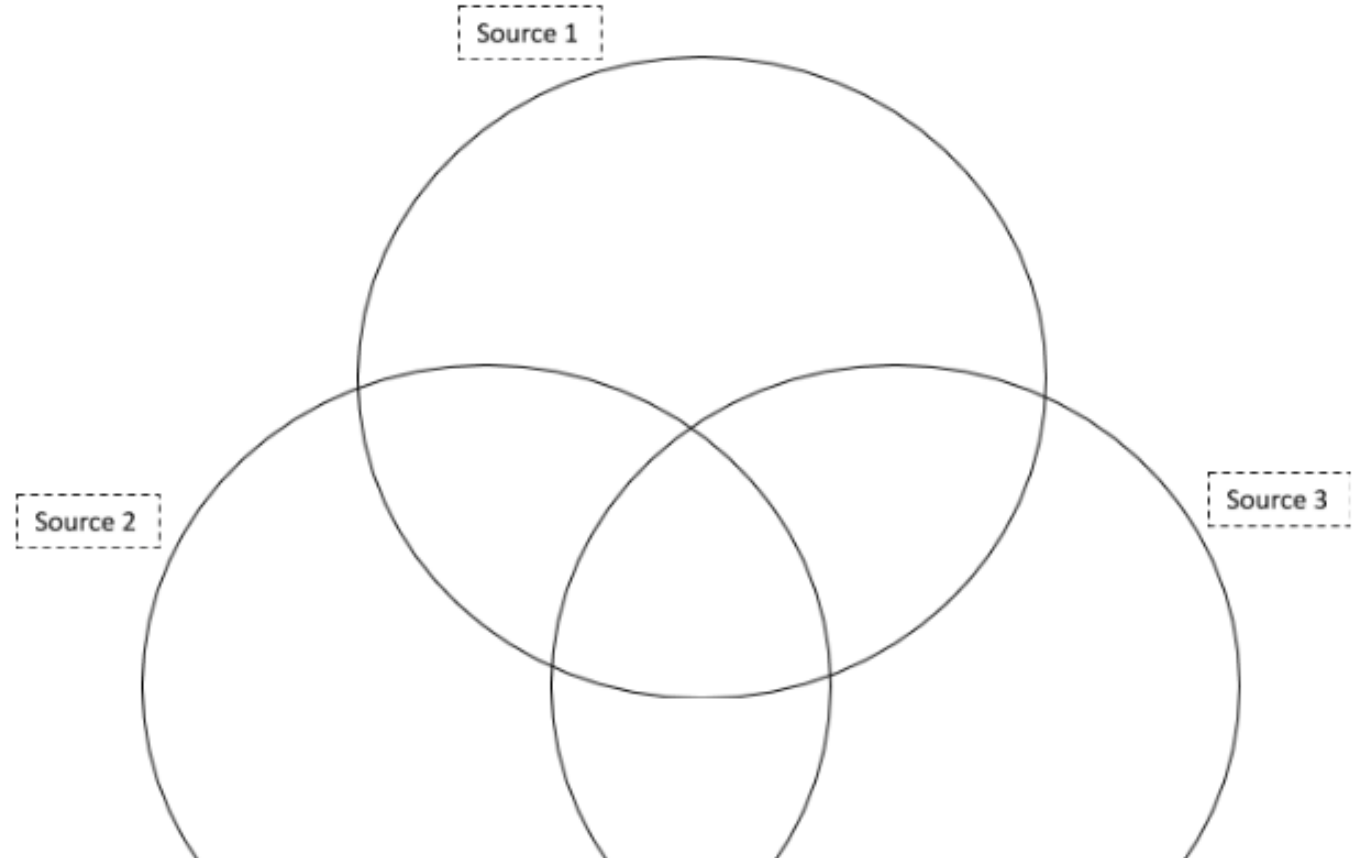
- **Why op-eds? They are short, and usually have a clear argument.**
- **Worksheet has space for the AB style notes, and a venn diagram to visualize the connections**

# Synthesis with OpEds

Source 1:  
What does this source say?

Source 2:  
What does this source say?

Source 3:  
What does this source say?





# Theory

- Originally focused on how to find theory
- Had to be reexamined and reworked
- Shifted to focus more on why and how we use theory in research

# Theory

<b>Problems</b>	<b>Theory to consider</b>
You want to study and explain racial profiling.	
You want to study and explain educational policies and learning.	
You want to study and explain political behavior and the differences by political party.	
You want to study and explain social media use by politicians and or voters.	
You want to study and explain how local governments decide how to budget social projects and the prioritization practice they use to assign what is done first.	
You want to study and explain how foreign nations collaborate, engage in foreign policy and or diplomacy.	
You want to study and explain how the national government responds to natural disaster – either within the USA or internationally. (Think Haiti, Texas, Puerto Rico)	
You want to study the implementation and effectiveness of public policy as it relates to health care.	
You want to study and explain the role of government in	

Did it work?!



Research Findings:  
Pre/Post Test

	<b>Section 02 (12:30)- Non-Embedded Section (n=17)</b>			<b>Section 01 (5:30) – Embedded Section (n=15)</b>		
	PRE	POST	Percent Change	PRE	POST	Percent Change
MEAN	11	13.4	21.82%	11	11.8	7.27%
MODE	10, 12	13		6, 11, 12, 14	12, 15	
MEDIA N	10	13	30%	11	12	9.09%
Std. Dev.	2.8	3.2		3.3	2.6	

Research Findings:  
Course Assessment Report

<b>Assignment</b>	<b>Mean- 02 Non- embedded</b>	<b>Mean- 01 Embedded</b>	<b>% &gt; 70%- 02 Non- embedded</b>	<b>% &gt; 70%- 01 Embedded</b>
Literature Review	66	70	53	60
Theoretical Framework	86	80	87	73
Methodology	80	80	70	80
Midterm Exam	83	88	70	94
Final Exam (Final Proposal)	78	80	74	94

# Artifact Review

- Rubric Revision
- IRR calculated at 92%
- 3 reviewers, each reviewed 2/3
  - Each artifact reviewed by 2 reviewers
- Met to discuss any outliers

## Artifact Review

- **Null hypothesis:** there would be no difference in the impact and outcome of an embedded librarian upon student artifact scores.

# Research Findings: Artifacts

<b>Literature Review</b>	<b>Section 02 (Non-embedded)</b>	<b>Section 01 (Embedded)</b>
Mean	2.8	2.8
Standard Deviation	0.9	0.9
Standard Error	0.31	0.31
Minimum	1.7	1.6
Maximum	4.3	4.6

The literature review papers presented mean scores that were statistically different at the 0.05 Alpha level (2-tailed 9.826E-08). The null was rejected.

<b>Theoretical Framework</b>	<b>Section 02 (Non-embedded)</b>	<b>Section 01 (Embedded)</b>
Mean	3.0	3.0
Standard Deviation	1.0	0.8
Standard Error	0.32	0.32
Minimum	1.5	2.0
Maximum	4.7	4.3

The theoretical framework papers presented mean scores that were statistically different at the 0.05 Alpha level (2-tailed 2.223E-07). The null was rejected.

<b>Final Research Proposal</b>	<b>Section 02 (Non-embedded)</b>	<b>Section 01 (Embedded)</b>
Mean	3.3	3.0
Standard Deviation	0.8	0.8
Standard Error	0.29	0.29
Minimum	1.7	1.4
Maximum	4.6	4.3

The final research proposals presented mean scores that were statistically different at the 0.05 Alpha level (2-tailed test - P-value = 2.227E-08). The null was rejected.

Research Findings:  
Student Contact  
with Librarian

	<b>Section 02 (Non- embedded)</b>	<b>Section -1 (Embedded)</b>
Number of Students	3	6
Contact points		
Reference Transactions	8	16

# Collaboration

Strengths &  
Limitations



Strengths &  
Limitations

**Time**



Where to now?

- Established with Political Science
- Attempting to expand to other Research Methods courses, including graduate level.



## Suggestions

- **Start small**
- **Find true partners**
- **Assess**

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Activities and slides can be found  
here: <https://bit.ly/2KcpQxd>

Questions?

Contact [faith.rusk@udc.edu](mailto:faith.rusk@udc.edu)