

## **WILU 2016: Intersections in Information Literacy and Library Instruction**

**Title of Presentation:** An Interdisciplinary Pilot Project Scaffolding Course Research Assignments to Incorporate Information Literacy Skill Development

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**Topic Category:** Assignment Design; Embedded Librarianship; Faculty Collaboration

Embedding librarians and systematic, multiple Information Literacy (IL) sessions into courses is gaining popularity. However, this is time-intensive for both faculty and librarians; faculty have to find time in their courses for multiple IL sessions, and librarians have to find time to teach all of these sessions across the curriculum. How can we embed librarian expertise and IL skill development into courses in a more sustainable way?

This presentation describes a cross-disciplinary partnership between the Behavioral Sciences librarian and four faculty in Anthropology, Psychology, and Sociology at the University of Michigan-Dearborn on a pilot project which addresses this challenge. This pilot project began because faculty were finding that many of the students in their courses seemed to be getting overwhelmed by their research papers and projects, which was reflected in poor performance on these assignments. The pilot project team took an assignment scaffolding approach to address these issues. Assignment scaffolding involves taking complex assignments, such as research papers and projects, and breaking them down into smaller components. The pilot project team systematically restructured the research papers and projects in their courses to create scaffolded assignments reflecting the steps of the research process. IL skill development was integrated into these graded assignments, which built towards final research papers and projects. These scaffolded assignments were then piloted in twelve courses across Behavioral Sciences disciplines, with assessments to measure the overall effectiveness of this pilot project.

This presentation walks through the process of restructuring and rewriting research papers and projects to incorporate IL skill development in a systematic, meaningful way. This presentation also discusses the benefits of adopting the assignment scaffolding method to integrate librarian expertise and systematic IL skill development into a course and across the curriculum, as well as the sustainability of this method.

# Scaffolding Course Research Assignments to Incorporate Information Literacy Skill Development: An Interdisciplinary Pilot Project

## University of Michigan-Dearborn:

- Nadine Anderson, Behavioral Sciences Librarian (@NadineFAnderson)
- Pam McAuslan, Associate Professor (Psychology)
- Paul Draus, Professor (Sociology)
- Arlo Clark-Foos, Associate Professor (Psychology)
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WILU Conference 2016



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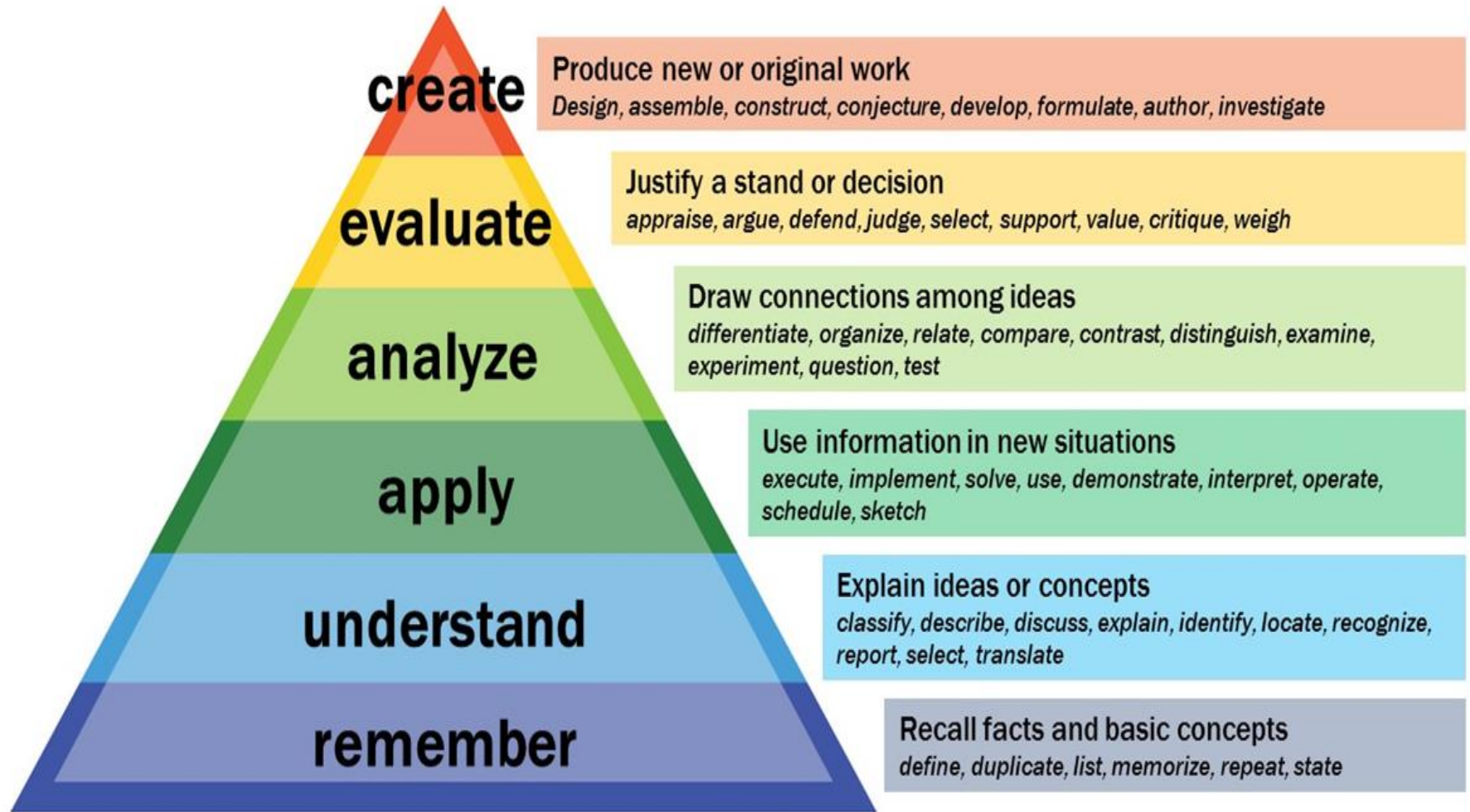
When students receive a research assignment due at the end of the semester, what steps should they follow?

# Research Assignment Steps



1. Develop a focused research question
2. Find research articles
3. Evaluate and select articles
4. Analyze articles to find key information
5. Use articles to build arguments
6. Synthesize articles into coherent themes/conclusions
7. Cite and format paper correctly (APA)

# Bloom's Taxonomy



@cirtlmooc



# Finding A Solution: The Usual Suspects



- One-Shot IL Sessions
- Embedded/Multiple IL Sessions

# Finding A Solution



- Incorporate librarian information literacy expertise
- Replicable across curriculum
- Easy to incorporate into courses
- Manageable for librarian

# Finding A Solution: Inspirations



- Assignment Redesign (Sweet & Burke, 2014)
- Blended Instruction (Nelson, Morrison, & Whitson, 2015)
- Scaffolded Library Activities (Getty & Chibnall, 2013)
- Active Learning & Flipped Classrooms (Stewart, Houghton, & Rogers, 2012)



# Finding A Solution: Pilot Project



- Restructured with sub-assignments
- Scaffold to final assignments
- [LibGuides](#) with instructions
- One flipped classroom session
- Sub-assignments graded by faculty

# Pilot Project: Scaffolded Assignments



## Textbook Analysis Assignment

- Learn more about their topic idea/broad research area in their course textbook
- Highlight aspects which interest them
- Use that info to create a strong research question
- Find citation information for their textbook and create an APA citation

# Pilot Project: Scaffolded Assignments



## Article Analysis Assignment

- Find 2 peer-reviewed articles
- Apply evaluative criteria to indicate why they selected them
- Read and analyze each article to find and summarize key information
- Build their arguments using these articles
- Identify relationships between articles and synthesize their arguments and evidence
- Find citation info for their articles and create APA citations

# Pilot Project: Assessments



- Pre/Post Assessment
- Student Feedback
  - 1-Not at all Helpful
  - 2-Slightly Helpful
  - 3-Somewhat Helpful
  - 4-Quite Helpful
  - 5-Very Helpful
- Faculty Feedback

# Pilot Project: Librarian Responsibilities



- Create fillable assignment forms (AdobePro)
- Create assignment rubrics
- Revise course LibGuides
- Co-teach flipped classroom session
- Code and compile assessment data

# Pilot Project: Faculty Responsibilities



- Add assignments to course syllabus and CMS
- Introduce assignments to students
- Co-teach flipped classroom session
- Give assignment grades
- Administer pre/post assessments

# Pilot Project: Action!



- Fall 2015/Winter 2016
- 12 courses

# Pilot Project: Free Range Faculty



- 3 provided feedback, 1 didn't
- 2 used both assignments, 2 only used one
- 1 used name: "Library Assignment"
- 2 listed assignments separately, 2 listed them as sub-assignments



# Pilot Project: Overall Findings



## Final research assignment quality improved

- Research questions tighter, sources and arguments better, papers better organized
- student questions leading up to the paper – were much more “on the right track”
- “the analysis assignments help them practice formatting, thinking about articles the “right” way, and they are forced to at least have some concept of how the paper is going to be organized”
- “the scaffolded assignments lifted up the grades and quality of my average students: their lit reviews were far better than usual”
- “having this assignment has helped with the students who struggle moving the bottom grades up so that I didn't see any Ds this time around”

# Pilot Project: Overall Findings



## Students internalized skills

- Post Assessments indicated that students significantly improved and internalized their skills and strategies in all the areas we were targeting:
  - Developing strong, focused research questions
  - evaluating and selecting their sources
  - using their sources to build arguments
  - synthesizing their sources
  - citing their sources

# Pilot Project: Overall Findings



- Students found the assignments “quite helpful”:
  - Forced them to start work on their final papers/projects early
  - Gave them time to change their topics, to gather and “really understand” their sources, and then organize them
  - Feedback from instructor helped them “get on track” or “change course,” so they could make their paper or project better
  - Used resources like the LibGuide instructions which they wouldn’t have used if they weren’t forced to
  - Used skills they hadn’t thought about before
  - Felt more confident and comfortable doing research projects going forward
- “In the beginning I was really annoyed that I had to do the assignment, but it turned out to be really valuable, and made the final paper easier and quicker to put together.”
- “Due to this experience, I believe in the future I will feel more comfortable with independent research-based projects”

# Pilot Project: Cost/Benefit Analysis



Was the extra work of grading and providing feedback on the scaffolded assignments worth it?

- All faculty collaborators agreed that the benefits from the scaffolded assignments made the extra work worthwhile
- “while the extra assignments are indeed more work, I benefit by having better papers/projects at the end. Ultimately, my frustration level is lowered, even if my work level might increase a bit. Pedagogically, it's also a much better way to teach, than to simply expect them to "figure it out" (aka. old school method).”

# Pilot Project: Replicability



Would they recommend incorporating these scaffolded assignments to other faculty in the Behavioral Sciences program?

- All faculty collaborators would recommend to other faculty incorporating these scaffolded assignments into courses with research projects/papers/presentations
- “if we did this more consistently across the board, we'd have some much better prepared students by junior and senior years”

# Pilot Project: Lessons Learned



Feedback is very, very important

# Pilot Project: Lessons Learned



Incorporate as sub-assignments under  
final assignment

# Pilot Project: Lessons Learned



Do NOT call them “library assignments”



# Pilot Project: Lessons Learned



**Do not assume student technology skills**

# Next Steps



- Continued scaffolded assignment use
- Incorporate best practices
- Encourage other faculty to use assignments
- Final Research Assignment Redesigns

# Conclusions



- Assignment scaffolding works!
- Strategic
- Manageable

# References



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# Questions?



I welcome your questions and feedback:

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