So Many Sections, So Little Time: Using LibWizard to Teach Information Literacy to Hundreds of Students

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Today’s Roadmap

- Describe/Demonstrate
- Results/Lessons Learned
- Ideas/Active Learning
Describe/Demonstrate
BIOL 1245: Principles of Biology Laboratory

- Freshman Biology Lab
- 77 sections over 3 days
- Sections happen simultaneously
- 776 students
- Previously, unable to integrate library

PROBLEM
BIOL 1245: Principles of Biology Laboratory

- LibWizard tutorial made of 5 modules
- Included Activities and Assessments
- TAs practiced taking the tutorial
- "On Call" via Zoom all day during lab days
- Creation of an FAQ for students who wrote questions at the end of the tutorial

SOLUTION
Timeline (June 2020 - August 2020)

Professor reached out early June 2020
Met with professor via Zoom mid-June 2020
I proposed modules in outline form late-June 2020
Met with professor via Zoom multiple times in July 2020
Completed most modules by end of July 2020
Finished tweaking modules and "trained" TAs by start of classes (mid August 2020)
Students completed modules before, during, and after their lab (2nd week of classes—mid August 2020)
Sent students an FAQ mid September 2020
What is LibWizard? Why Use It?

- Part of Springshare Suite
  - Can create Forms, Quizzes, Surveys, and Tutorials

- Tutorials
  - Can embed the quizzes, forms, surveys, live websites, videos, text, images
  - Can Create Multiple Modules
  - Can Link Multiple Modules to Each Other
  - Students Can Email Themselves Results
  - Simple, but Versatile

1. Collect Info: Form Wizard
   - Create & Embed Forms... Anywhere.
   - FORM WIZARD FEATURES

2. Gather Feedback: Survey Wizard
   - Gather Invaluable User Feedback.
   - SURVEY WIZARD FEATURES

3. Assess Learning: Grordable Quizzes
   - Supplement Instruction Efforts.
   - QUIZ WIZARD FEATURES

4. Interactive Learning: Tutorials Wizard
   - Build Self-Paced Learning Modules.
   - TUTORIALS WIZARD FEATURES

LIBWIZARD - FORMS, SURVEYS, QUIZZES & TUTORIAL BUILDER
Principles of Biology Laboratory: BIOL 1245 LibWizard Modules

- Introduction and Pre-Assessment
- Introduction to Scientific Literature
- Introduction to Topic Development
- Introduction to Searching for Scientific Literature
- Conclusion and Post-Assessment
Hello! Today we will learn about doing library research and become familiar with the Pius XII Memorial Library at Saint Louis University. We will walk through five short modules that will focus on three learning goals.

By the end of the lab today you will have learned how to:

1) Identify and describe scientific literature

2) Develop topics and keywords to use in searching for scientific literature

3) Search for scientific literature in the library’s databases

In addition, you will learn about some of the other services the library offers you. Don't worry if you get stuck at any point. We are here to help you learn and there will be a chance at the end to enter in any questions you have remaining after the lessons today.
In this first module you will be introduced to the library, research, and me. Saint Louis University has three libraries, but the one you will use the most is the Pius XII Memorial Library. Many things are available online including journal articles, ebooks, research help, and chatting with a librarian.

The library website is
https://slu.edu/library
Write it down! Memorize it! You won’t regret it.

On the next page, let’s watch a short video introduction.

Research is formalized curiosity. It is poking and prying with a purpose. It is a seeking that he who wishes may know the cosmic secrets of the world and they that dwell therein.

(Zora Neale Hurston)

izquotes.com
My name is **Megan Toups** and I'm the STEM Librarian at Saint Louis University, which means I am here to help YOU.

**My email is**

megan.toups@slu.edu (Write this down too!).

I'm available to chat or you can email me. I can also set up a research appointment to work with you remotely over Zoom. I can help you get started with research, troubleshoot any issues you have,
Pre Assessment Quiz

BIOL 1245 Pre Assessment

What are two clues to distinguish a scientific research article from a scientific review article?  

Write down the name of a science database available at SLU.  

Name at least one reason it is a good idea to look for scientific articles in a library database rather than only searching Google.  

What is your name?  

What is your SLU email address?  

Submit

Please answer the questions on the right. If you don't know the answers, it's okay. Just try your best.

You will NOT be graded.

We just want to see what you already know coming into this lab. We'll learn more about these things in today's lab.

When you click submit your results you will be prompted to email yourself the results. You MUST email the results to yourself. Later on you will submit these to your instructor.

Check the Box When You Have Submitted Your Pre Assessment AND Emailed it To Yourself.  

□ Completed the Pre Assessment
If you would like a copy of the results, please enter an email address: Continue

Please answer the questions on the right. If you don't know the answers, it's okay. Just try your best.
COVID-19 Considerations

E protein
S protein
M protein

How to Access Online Library Materials from Off Campus

You MUST go through the library website so that the system can authenticate you with your SLU net ID and password. Do NOT google the name of the database as you will not have a way to be authenticated.

Keeping Up to Date with Any Changes in Services Due to Covid-19

Please periodically check the library website for any changes in services and access due to Covid-19. Here is the library website: https://slu.edu/library
What did we learn?

The library website is https://slu.edu/library
If accessing resources off campus, you must go through the library homepage.

On the website you can:
Find research help
Chat with a librarian
Access databases, articles, books, and other resources
Find updates about library services due to COVID-19

If you remember nothing else, remember you can CHAT live from anywhere with an internet connection with a librarian for help.

Your STEM librarian is Megan Toups and I can be contacted at

Summary

AFTER NINETEEN ADDITIONAL TRIALS, OF COURSE, THE RESULTS WERE SHOWN TO BE ANOMALOUS.

“The Tortoise And The Hare” is actually a fable about small sample sizes.
As you can see there are a lot of other things I could have done, such as having students answer multiple choice questions and adding files.
My name is Megan Toups and I'm the STEM Librarian at Saint Louis University, which means I am here to help YOU.

My email is megan.toups@slu.edu (Write this down too!).

I'm available to chat or you can email me. I can also set up a research appointment to work with you remotely over Zoom. I can help you get started with research, troubleshoot any issues you have, or help you find resources. If you aren't sure if I can help, ask! If I don't know, I'll try to find you someone who does. There are NO dumb questions, and no question too big or too small.

Watch this short video introduction to the library, research, and me. You can use the icons at the bottom of the video to expand the video to full screen or turn on the closed captions.
Results
Information Collected

- Pre-Assessment
- Quiz
  - Pro of Searching Library Database
- Topic Development Activity #1
  - Finding Keywords for Topic
- Topic Development Activity #2
  - Narrowing Keywords
- Searching Literature Activity #1
  - Searching and Filters
- Searching Literature Activity #2
  - Using DOIs
- Post-Assessment
Pre and Post Assessment Questions

What are two clues to distinguish a scientific research article from a scientific review article? (required)

Write down the name of a science database available at SLU. (required)

Name at least one reason it is a good idea to look for scientific articles in a library database rather than only searching Google. (required)

What is your name? (required)

What is your SLU email address? (required)

Submit
Pre and Post Assessment Questions

What are two clues to distinguish a scientific research article from a scientific review article?  (required)

Write down the name of a science database available at SLU.  (required)

Name at least one reason it is a good idea to look for scientific articles in a library database rather than only searching Google.  (required)

What is your name?  (required)

What is your SLU email address?  (required)

Submit
<table>
<thead>
<tr>
<th>Actions</th>
<th>Submitted</th>
<th>Grade</th>
<th>Research Vs. Review Article</th>
<th>Science Database</th>
<th>Database Vs. Google</th>
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<td>06:50 PM</td>
<td>Research has facts and no bias whereas a review has opinions and a bias.</td>
<td>Opposing Viewpoints</td>
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<tr>
<td></td>
<td>Nov 25, 2020</td>
<td>10:59 PM</td>
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<td></td>
<td>Nov 04, 2020</td>
<td>11:21 PM</td>
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<td></td>
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<td>01:25 PM</td>
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<td>ebSCO and</td>
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Question: Name One Science Database Available at SLU

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<th>Pre-Assessment</th>
<th>Post-Assessment</th>
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<tr>
<td>Total Submissions: 744</td>
<td>Total Submissions: 699</td>
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<tr>
<td>Total Correct: 457</td>
<td>Total Correct: 668</td>
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<table>
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<th>Pre-Assessment</th>
<th>Post-Assessment</th>
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<tbody>
<tr>
<td>Percent Correct: 61.4%</td>
<td>Percent Correct: 95.6%</td>
</tr>
</tbody>
</table>

Number of Correct Answers was **34.2%** higher in Post-Assessment.
Additional Post-Assessment Questions

Name two things you learned during this session:  (required)

Write any questions you have and I will answer them in an anonymous FAQ for the class:
Top Topics Students Learned:

- How to Access the Library’s Online Resources
- How to Use the Databases
- Difference between a Research Article vs. a Review Article
- DOIs
- The Importance of Keywords
- How to Refine Searches
- The Value of Databases vs. Google for Scholarly Research
What Students Learned (Their Own Words)

“Databases are more than just fancy search bars…”

“I learned some really valuable stuff…#1. Most of our teachers will ask us to use the databases and scholarly research, the days of searching Google are probably done…”

“Science is very minutia intensive…”

“SLU library is not that scary and useless thing I thought from the beginning”

“I learned what a scientific review article is…before, I thought it was review by anyone online of a science topic whether they are credible or not…”

“I didn’t know doi.org was a thing and this is gonna be super useful I can tell.”
FAQ for Students

Answers to Library Questions for BIOL 1245

Table of Contents:
- ABOUT ME
- ACCESS ISSUES
- ACCOUNTS
- BOOKS
- CHOOSING DATABASES AND WEBSITES
- CITATIONS
- DOIs
- KEYWORDS
- LIBRARY MISC.
- PUBLISHING RESEARCH
- READING SCIENTIFIC ARTICLES
- RESEARCH VS REVIEW ARTICLES
- QUESTIONS THAT YOUR PROFESSOR CAN ANSWER
Lessons Learned
Lessons Learned (For BIOL 1245)

- When designing an assessment, be conscientious about how many questions have a “right or wrong” answer vs open ended questions.
- There were areas I didn’t cover (such as how to search for books) that could be helpful in the future.
- Don’t need to be on Zoom for the whole lab, but be available at desk for emails all day.
Lessons Learned (For LibWizard)

- Don’t be afraid to play around
- Work a little at a time to give yourself time to learn
- Do test runs with modules to make sure everything works
- Use background colors of text to emphasize sections within a module
- Keep it simple
Weaknesses
- Not always intuitive
- Limited in layout of each slide
- Managing multiple tutorials

Strengths
- Students can go at their own pace
- Interactive and uses a variety of media
- Simple, but versatile
- Can gather statistics and information
Unlocked an Opportunity

- New tutorial, “Science and Society,” focused on science communication and copyright for second part of freshman biology lab (BIOL 1265) for Spring semester
- Created pre-assessment for Spring tutorial that checks on their retention of the lessons from the Fall and preps them for the Spring tutorial
Ideas, Activity, Discussion
Ideas

- Use for training new staff
- Use to “flip” classrooms
- Use to integrate in classrooms when professor does not have class time to spare for library instruction
- Use for workshops
- Use to teach digital literacy
Takeaways

- You can keep it simple
- It opens up new opportunities for the delivery of instruction
- Can be used to gather statistics and assessments
- Powerful tool to reach 100s of students
Breakout Room Brainstorm

- Take 5 minutes to think and discuss:
  - How you might use this tool at your institution...
  - Are you already doing something similar? If so, what are you doing...
  - Talk about this in your breakout room and then we will share with each other in the main room.
Thank you!

Contact me: megan.toups@slu.edu