Pedagogical v. Pathfinder: Reimagining Course & Research Guides for Student Success

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In one word or short phrase, what is the purpose of research/course guides?

Responses: https://mqlicker.com/r/i8m1

Session Key: 377971
Does the design and layout of course & research guides impact student learning?
Why?

http://www.digitalpedagogylab.com/hybridped/libguides-pedagogy-to-oppress/
AS YOU CAN SEE, I'VE MEMORIZED THIS UTTERLY USELESS FACT LONG ENOUGH TO PASS A TEST QUESTION. I NOW INTEND TO FORGET IT FOREVER. YOU'VE TAUGHT ME NOTHING EXCEPT HOW TO CYNICALLY MANIPULATE THE SYSTEM. CONGRATULATIONS.
Learning Theory

Cognitive Load

https://teachinghow2s.com/blog/cognitive-load
Guide Design

Pedagogical

Pathfinder

For an example of a current pedagogical guide:
http://iupui.campusguides.com/bridge
This guide is for students in the Dental Hygiene FYS, to help you find sources for your assignment.

**Article Databases**

- **Google Scholar**
  
  Google Scholar provides a simple way to broadly search for scholarly literature. From one place, you can search across many disciplines and sources: peer-reviewed papers, theses, books, abstracts and articles, from academic publishers, professional societies, preprint repositories, universities and other scholarly organizations. Google Scholar helps you identify the most relevant research across the world of scholarly research.

- **Academic Search Premier (EBSCO)**
  
  This multi-disciplinary database provides full text for nearly 4,500 journals, including full text for more than 3,600 peer-reviewed titles. PDF backfiles to 1975 or further are available for well over one hundred journals, and searchable cited references are provided for 1,000 titles. Academic Search Premier is updated on a daily basis. This database is partially paid for by INSPIRE.
Guide Design
Pedagogical

The Research Process

Research is an iterative process, meaning individual steps may be repeated multiple times. The graphic below shows one way that we can do research, but it doesn't look the same for everyone. The research process is non-linear and often messy. As you go through this guide, you should feel free to jump back and forth between steps as you see fit or to come up with a process that works better for you.

Welcome! Start Here

1: Your Question
2: Find Background Info
3: Find Materials
4: Read, Evaluate, Take Notes
5: Refine Topic
6: Citation Help
7 & 8: Think, Synthesize & Write
End-of-class Evaluation

Think About Your Information Need Before Searching

Before diving right into a search, stop and take a moment to consider what type of resource you want to find. Do you need a book? A scholarly article? Do you need a blog written by or YouTube interview of an expert? Do you need raw data? Next, think about where that type of information might be found. Will a simple internet search locate what you need, or do you need another tool? Use the chart below to think about where you might find the information you need. If you're not sure where to start, this would be a great moment for you to contact me!
Outside of the classroom
aka self-directed learning
Methodology

Workflow

Pathfinder or Pedagogical Guide

Pre-Survey

Simulated Research Assignment

Post-Survey (Usability)

3 scholarly sources

n=22

First-Year
Sophomore
Junior
Senior
Graduate
<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Developed</th>
<th>Emerging</th>
<th>Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Keywords &amp; Synonyms</strong></td>
<td>Developed</td>
<td>Emerging</td>
<td>Initial</td>
</tr>
<tr>
<td>Sufficient keywords and synonyms</td>
<td>Multiple keywords identified</td>
<td>Limited identification of keywords</td>
<td>No keywords beyond those used in the original question/topic</td>
</tr>
<tr>
<td>● Multiple keywords identified</td>
<td>Multiple, appropriate synonyms identified for each keyword</td>
<td>Few or improper synonyms</td>
<td>No viable synonyms found for the keywords</td>
</tr>
<tr>
<td><strong>Research Question</strong></td>
<td>Question is relevant to the topic</td>
<td>Question is kind-of relevant to the topic - containing elements of the topic but not everything (e.g., Islam in America)</td>
<td>Question is not relevant to the topic, very vague, OR only repeats the topic in question form</td>
</tr>
<tr>
<td><strong>Article (Relevance)</strong></td>
<td>Article content seems appropriate for the proposed question/topic</td>
<td>Article is only tangentially related to the proposed question/topic</td>
<td>Article is not related to the proposed question/topic</td>
</tr>
<tr>
<td><strong>Article (Scholarly)</strong></td>
<td>Article is from an appropriate scholarly journal</td>
<td>Article is from an authoritative source (e.g., NY Times) but not a scholarly journal</td>
<td>Article is not from an authoritative source nor a scholarly journal</td>
</tr>
<tr>
<td><strong>Evaluation</strong></td>
<td>Well thought out explanation of how the article was relevant to the topic or research question</td>
<td>Explanation is not completely thought out or clearly copied from article abstract</td>
<td>No explanation or no effort to explain (e.g., it’s scholarly, I found it in a database, etc.)</td>
</tr>
</tbody>
</table>
Results

Pedagogical

T1: Home

T2: 1. Your Question

T3: 2. Background Information & Books

T4: 3. Find Materials

Guide Interaction

Pathfinder

T4: Articles

T3: Reference Materials

T4: Articles
Results

Guide - Database Interaction

Pedagogical Pathfinder

Guide
T1: Home
T2: 1. Your Question
T3: 2. Background Information & Books
T4: Find Materials

Resources
Resource 1
Resource 2
Resource 3
Resource 4
Resource 5

Search Boxes
Without looking at guide, started using search boxes above.
(Search IUCAT or Search Articles)

Guide
T3: Reference Materials
T4: Articles

Resources
Resource 1
Resource 2
Resource 3
Results

Rubric

Pedagogical

Pathfinder
The resources listed on the guide were too many for me.

The research guide worked the way I want it to work.*

I was able to use the research guide without any additional instructions.

The research guide helped me evaluate sources (decide if something was a…

The research guide helped me improve my research skills.

The research guide was easy to use.

I would recommend the research guide to a friend.

The research guide was user friendly.

Overall, I am more confident about research.*

The research guide helped me develop my research question.

I learned to use the research guide quickly.*

I was able to recover from mistakes quickly and easily.

I quickly became skillful with it.‡

The resources listed on the research guide were sufficient for my needs.

Overall, I am satisfied with the ease of using the research guide to find a…

The research guide was easy to use.

The research guide helped me improve my research skills.

The research guide helped me evaluate sources (decide if something was a…

I was able to use the research guide without any additional instructions.

The research guide worked the way I want it to work.*

The resources listed on the guide were too many for me.

The research guide helped me find scholarly sources.

I easily remembered how to use the research guide.‡

I quickly became skillful with it.‡

I would like to be able to refer to any subject research guide provided by the…

Pedagogical

Pathfinder

Post-Survey
Results

Post-Survey

- I would like to be able to refer to any subject research guide provided by the library for my...
- I easily remembered how to use the research guide.
- I quickly became skillful with it.
- I learned to use the research guide quickly.
- Overall, I am more confident about research.
- The research guide worked the way I want it to work.

p-value < 0.05

p-value close to 0.05

Pedagogical
Pathfinder
Student Perceptions

**Pedagogical**

- It is helpful to define what a scholarly article is as I didn’t know what it really meant.
- This is so cool! [Infographic of the research process]
- I like the way the resources are organized.

**Pathfinder**

- I don’t know where to start.
- I don’t know how to use databases and the research guide doesn’t help me figure out.
- So confusing.
Inside the classroom
Methodology

Instruction
• Two sections of first-year seminar
• n=40
• Same professor
• Same librarian
• Same course content

Assessment
• Pre-Test
• Post-Test & Usability Questions
• 2 weeks after library session
• End-of-Semester Test
• Annotated Bibliographies
• Rubric
Results

Improvement Between Assessments

-10%  -5%  0%  5%  10%  15%

pre-test to post-test  post-test to end-of-semester

Pedagogical  Pathfinder
choose and/or refine a research topic or research question.‡
choose appropriate databases and places in which to look for resources.‡
understand the research process and academic scholarship in general.‡
evaluate resources and choose the ones with the highest quality.‡
understand the difference in types of resources like scholarly and popular.
effectively search for resources (choose keywords, use Booleans, limiters, etc.).‡
organize and begin to synthesize my resources for use in my research project.‡
write using proper attributions and citations.
know where to look to find differences and changes in a topic or discipline.
choose and/or refine a research topic or research question.
choose appropriate databases and places in which to look for resources.
understand the research process and academic scholarship in general.
effectively search for resources (choose keywords, use Booleans, limiters, etc.).
evaluate resources and choose the ones with the highest quality.
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organize and begin to synthesize my resources for use in my research project.
write using proper attributions and citations.
know where to look to find differences and changes in a topic or discipline.

**Results**

“The research guide helped me...”
Closing the Loop
Conclusions

Outside the classroom study
Although no statistically significant performance difference between the two, students using the pedagogical guide reported a more positive experience and greater self-efficacy not seen in students using the pathfinder guide.

In-classroom study
Students using the pedagogical course guide demonstrated better learning and retention of concepts than students using the pathfinder guide.
LibGuides Best Practices

Welcome to the LibGuides Best Practices Guide

This guide is designed to enhance the user experience with digital assets of IUPUI Libraries. This guide provides best practices, tips, resources, and examples of how to design a guide using LibGuides.

- **LibGuides at IUPUI**: Explain background information on how LibGuides are used at IUPUI and the purpose of LibGuides.
- **Reuse, reuse, reuse!**: Describe what to reuse such as common boxes and resources.
- **Unified Presence**: Include IUPUI LibGuides design templates and information about layout design.
- **Best Practices**: Provide best practices on what should be in the Home, side-menu, how to present information, contact information, and etc.
- **Styles**: Contain information about images, different box types, and content (asset) types.
- **Audit**: Clarify what to do in order to make your guides up-to-date.
- **How-To**: Tutorials on LibGuides design (if you need more, tell us! Contact information is below).

Photo credit: cdmrsa.org

LibGuides Task Force Members

The LibGuides Task Force consists of the following members:

- Dentistry Library - Scan Stone (ssstone@iu.edu)
- Law Library - Susan DeMaine (sdemaine@iupui.edu)
- Medical Library - Amy Blevins (aeblevin@iu.edu), Jennifer Herron (jenberro@iu.edu), Kellie Kaneshiro (kkaneshi@iu.edu), Jason Lity (jaalily@iupui.edu)
- University Library - Yoo Young Lee (yooylee@iupui.edu), Sara Lowe (mlowe@iupui.edu)
Welcome! This guide is designed to help you with the research process for English W131: Reading, Writing, & Inquiry. Although your instructor is your primary contact for your course, I invite you to contact me for questions related to research, the library resources, or choosing a topic. My name is Bronwen and my contact information is on the left. Please email or call me with your questions. You may also request a one-hour consultation for individualized and more in-depth assistance.

For quick questions, or to just get started with a research project, feel free to ask for help at the Service & Information Desk on level 2 of University Library. It's available to you whenever the building is open.

Research is an iterative process, meaning individual steps may be repeated multiple times. The graphic below shows one way that we can do research, but it doesn't look the same for everyone. The research process is non-linear and often messy. As you go through this guide, you should feel free to jump back and forth between steps as you see fit or to come up with a process that works better for you.

The Research Process Infographic
**Changes**

**Old**

1. Your Question
2. Find Background Info
3. Find Materials
4. Read, Evaluate, Take Notes
5. Think & Synthesize
6. Organize Materials
7. Write
8. Think & Synthesize

**New**

1. Your Question
2. Find Background Info
3. Find Materials
4. Read, Evaluate, Take Notes
5. Organize, Write, & Cite
6. Think & Synthesize
7. Write
8. Think & Synthesize

**Research Process**

**Old**

- Your Information Need aka Thesis or Topic
- Is your topic too broad? Hint: If your search gives you thousands of results, it’s too broad; return to #1.

**New**

- Your Information Need aka Thesis or Topic
- Use these sources to brainstorm search terms.
Student Perceptions

Discuss how you think your research process might differ from someone who does not have access to the resources you have because you are a student at IUPUI.

• I think it would be fairly difficult because they would have to go search for research at a library or somewhere else. They wouldn't have the online resources we used.

• I think anyone outside of college has the exact same resources as anyone in college. Some databases just require payment and usually [the] school pays for it.

• They may have to find a different way to access the information which may be challenging if you do not live near a library or the people and resources to help you.
Thank You!

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Questions?
Poll

Will you make changes to your guides based on this presentation?

If so, how?

Responses: https://mqlicker.com/r/s8m3