



No, Really, Which Search Engine Do I Use?

Making a Guide for Finding Accessible Documents

Presented by Indiana University

Presenter



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I've been training the team and documenting
accessibility best practices since 2018.

Collaborators



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IU Indianapolis Library
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Agenda

1. Project Overview
2. The IU Library System
3. Problems Encountered
4. Process Used
5. The Library Linking Guide
6. Project Results
7. Reducing Barriers
8. Takeaways
9. More Resources

The Project



Who We Are

- Teaching & Learning Technologies (university IT)
- Instructional designers, service admins, and web developers
- Support online courses across all campuses

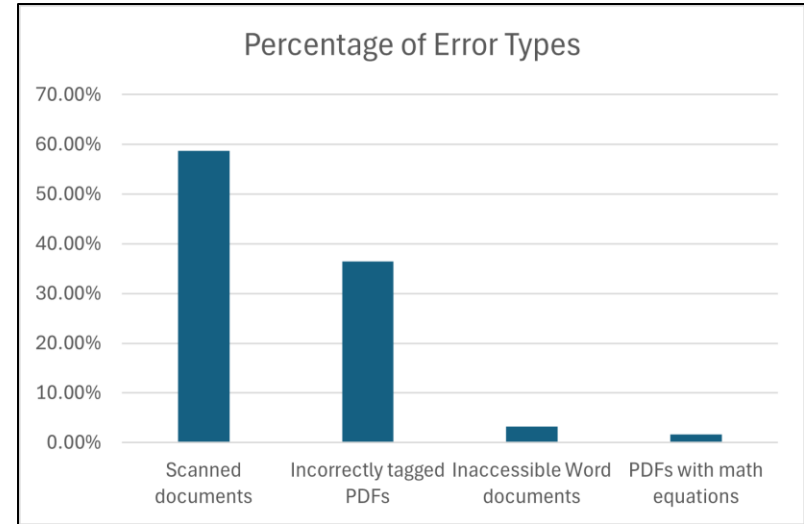


How We Got Involved

- Major multi-campus initiative
- Multiple instructors
- Ensure accessible base course
- No equivalent multi-campus library division

Project At A Glance

- Course topic: Informatics law
- Inaccessible documents: 104
- Error types:
 - Scanned documents (58.7%)
 - Incorrectly tagged PDFs (36.5%)
 - Inaccessible Word documents (3.2%)
 - PDFs with math equations (1.6%)



Project Challenges

- Short deadline
- Unfamiliar with libraries
- Specialized content
- No process yet



Starting From Scratch

**We started out learning the system
as complete beginners.**

This provided challenges, but also
gave us the perspective of a new
faculty member or student.



The System



What We Thought...

One Unified Library System

Campus

Campus

Campus

Campus

Campus

Campus

Campus

Campus

Campus



Use IU Catalog to search all resources on all campuses. Easy!

...What It's Really Like

So many questions!

Which search engine
do I use?

How do we teach
students to use the links?

Can we use
interlibrary loans?

What are
permalinks?

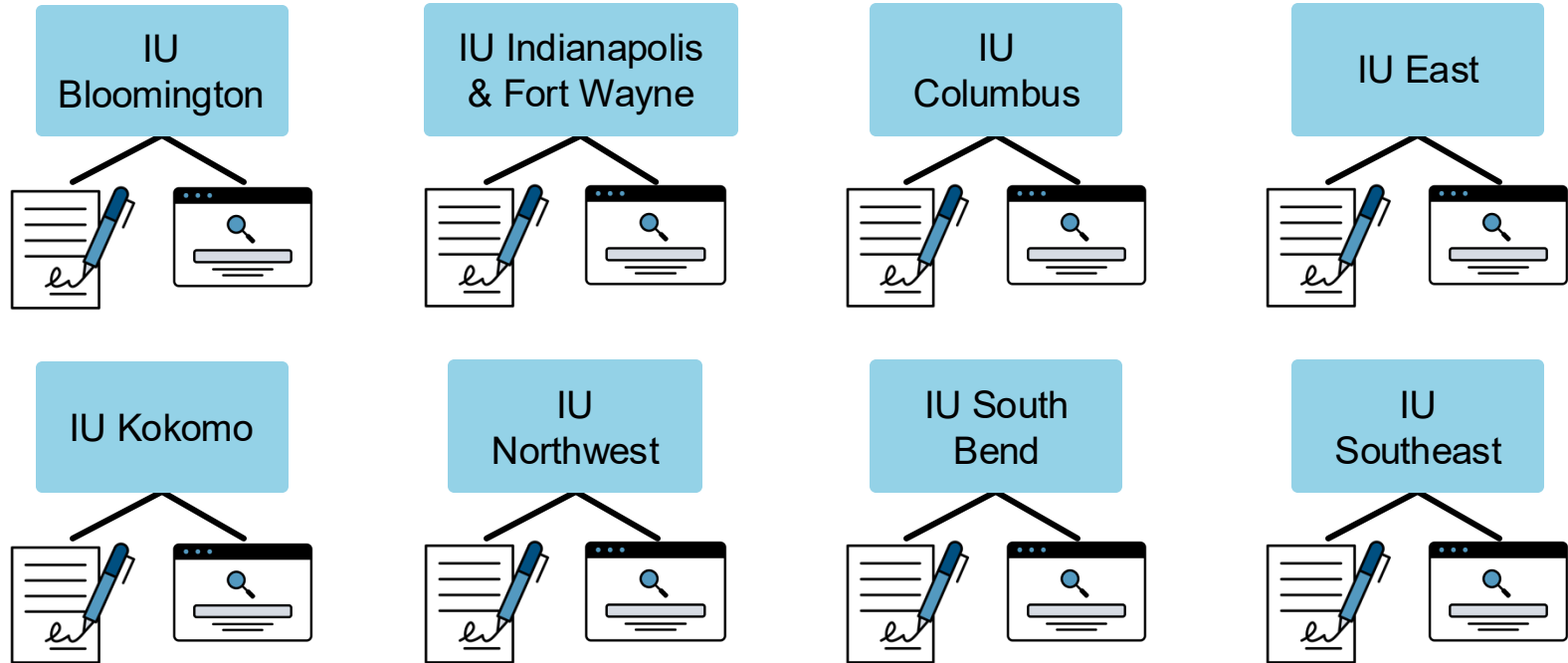
Uh...what's
EBSCOHost?

How do we know if a
format is accessible?

Will this **really** work for all
campuses?

What if the document
isn't available?

IU Library System



Problems Encountered



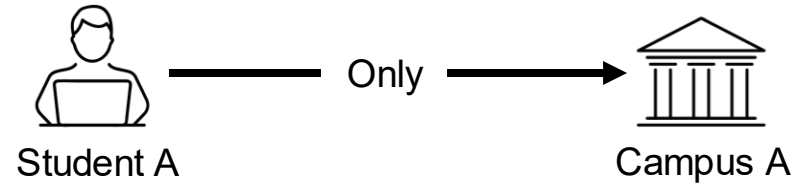
Campus Access

Usually, students, faculty, and staff can only access their campus' library.

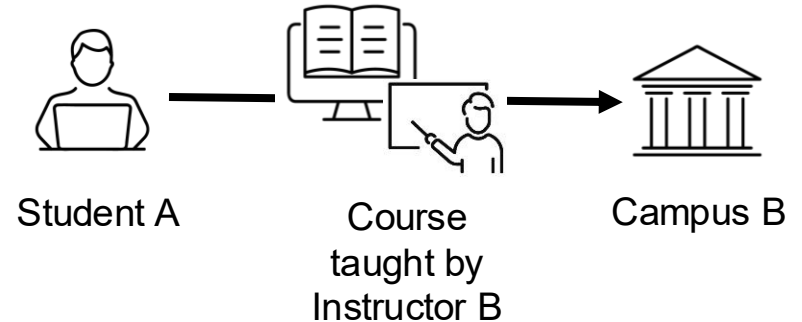
However, students can access their instructor's library resources for the duration of the semester.

TLT needed to request special access to act on behalf of instructor.

Standard Campus Access



IU Online Multi-Campus Access



Database Confusion

- **IUCAT versus OneSearch:** the right database makes a big difference!
- Campuses may have:
 - Partial database access
 - No database access
 - Specialized archives not in IUCAT or OneSearch

IUCAT

Primarily print & physical materials with some website links.

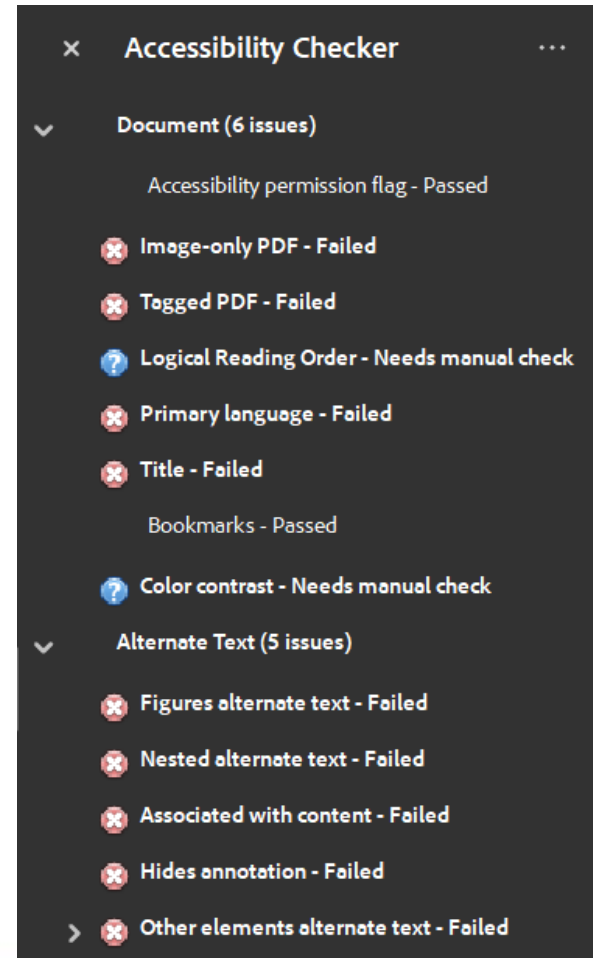
OneSearch

Primarily online journals, periodicals, and some websites.

Is It Really Accessible?

Every database format had to be checked for accessibility.

- Some were scanned PDFs
- Many had errors
- Checked with tools, keyboard tests, and manual review

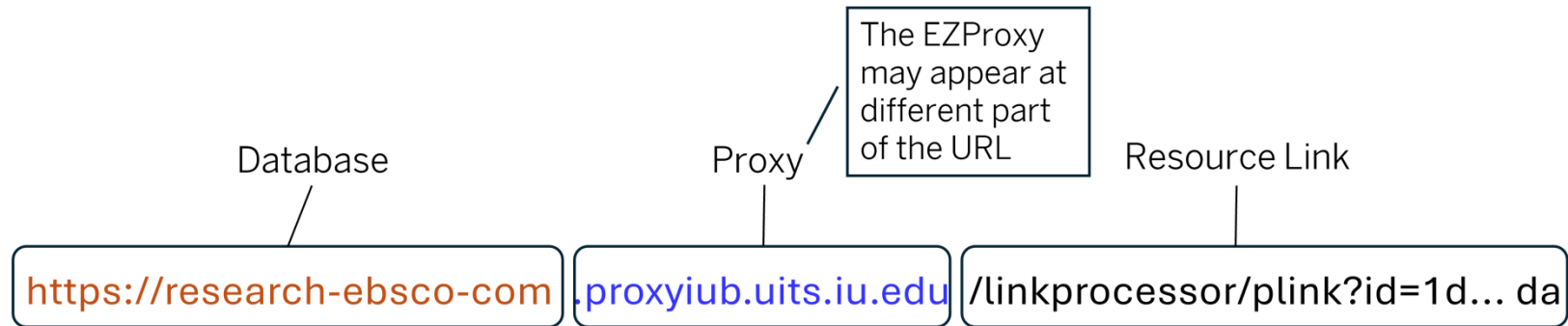


Permalink Trouble

Every database had different link formats and requirements.

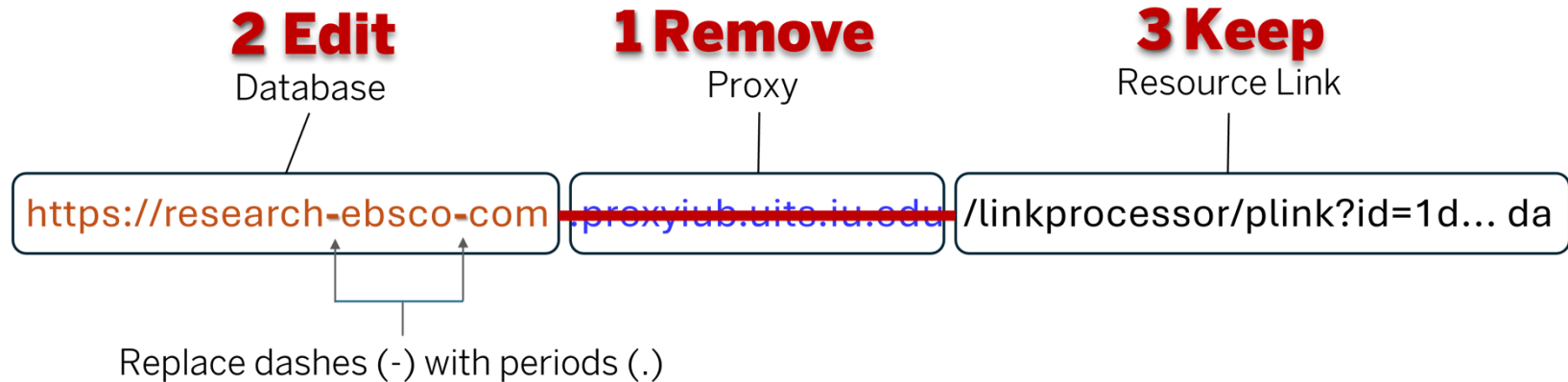
- IUCAT: web URL
- Other Databases:
 - Website name: replace dashes with periods
 - EZProxy: find and remove

Permalink Edits (1 of 2)



Images courtesy Chongning Sun of Teaching & Learning Technologies.

Permalink Edits (2 of 2)



Images courtesy Chongning Sun of Teaching & Learning Technologies.

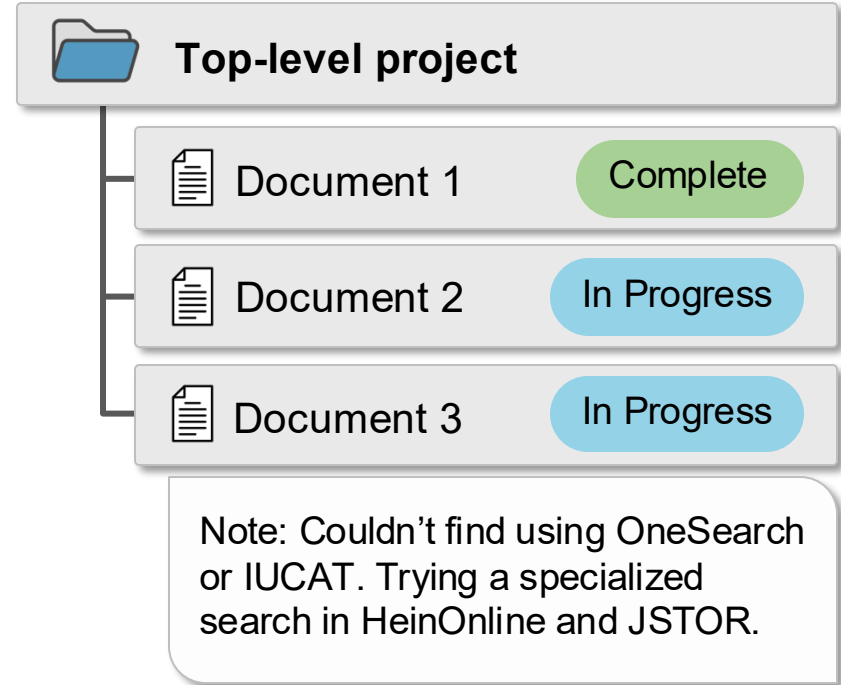
Our Process



Project Management

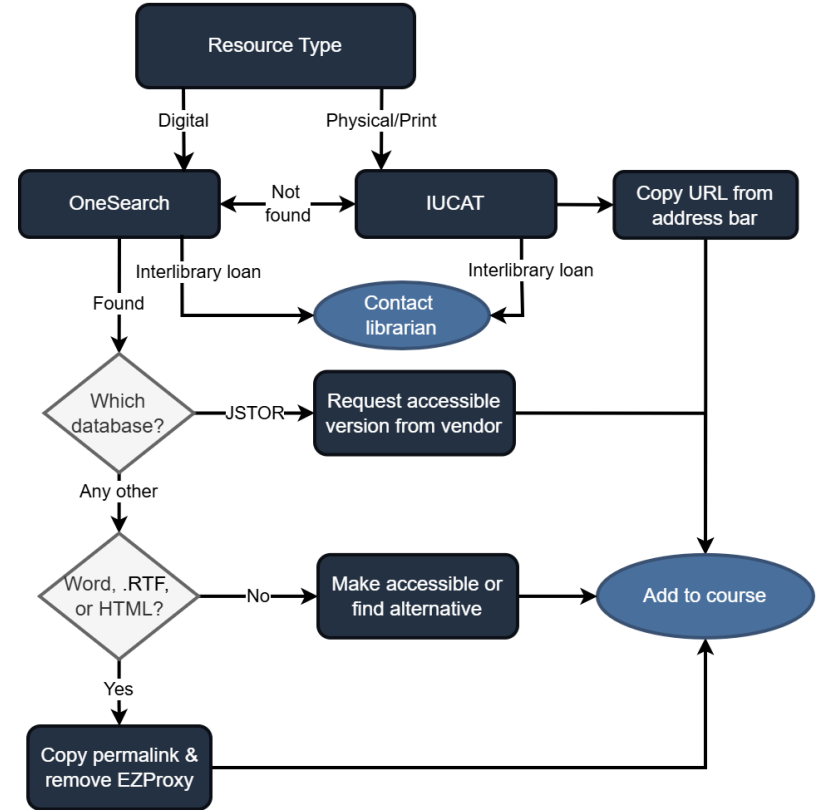
Project management software was essential.

- Coordinating tasks & following up on issues was a full-time job
- System developed over time
- Helps auto-track time spent, # of documents, issues
- Multiple conversations at once



Steps Taken

1. List all documents in central place.
2. Identify inaccessible documents.
3. Search campus OneSearch.
4. Search campus IUCAT.
5. Check topic-specific databases.
6. Check document accessibility.
7. Edit permalink.
8. Add to course and test.



Collaboration

Collaboration was essential too!

- Started with campus resources/guides.
- Liaised with Sara from IU Indianapolis Libraries for advice and feedback.
- Received draft feedback and accessibility advice from Brian and Mary of the ATAC.



The Library Linking Guide



What Should Be Included?

Already a large document – we wanted to avoid information overload.

- Quick overview of each section.
- What to look for in each system.
- What they will do and why they'll do it.
- Step-by-step instructions only.

What Should Be Left Out?

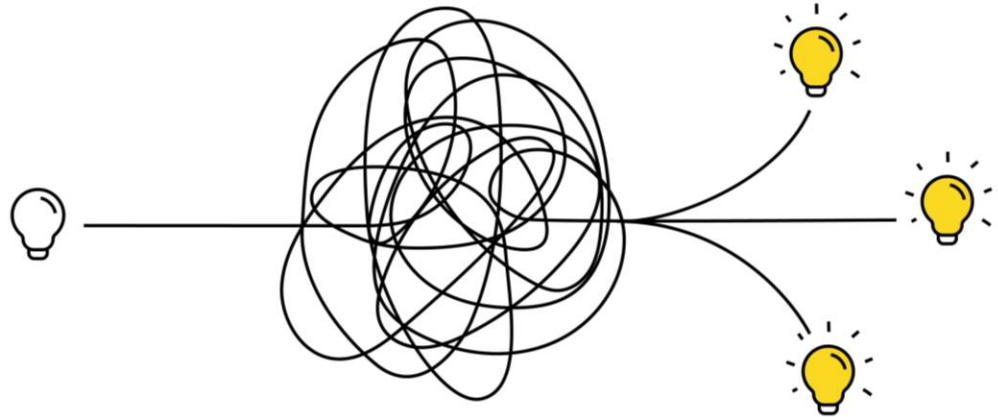
Some details are important but advanced knowledge.

- Understanding URLs (except to complete task)
- Differences in formats (PDF, Word, HTML, etc.)
- Be consistent and avoid too much jargon
- Specifics of each database/library system
 - Will connect with librarians instead

Feedback & Refinement

Shared with Library and ATAC for feedback.

- Gave each database its own section.
- Clarified confusing information.
- Fixed errors in process/details.



Final(-ish) Structure

- Introduction explaining Library systems and definitions.
- Flowchart for deciding process.
- Separate sections for each database.
- How to add and update links in Canvas.
- Contact info for each campus library.

Overview

This is a guide for finding digital resources in the IU Libraries and linking them in Canvas courses. Linking to library resources can provide many benefits, including:

- Library resources may reduce any costs of resources that otherwise have to be sourced from paid databases or journals.
- Resources are automatically updated by the publisher if changes are made.
- Multiple formats may be available to meet students' study methods.
- If an accessible version (HTML, Word, or EPUB) is available, you won't have to update that resource if a future accommodation request is made.
- Introducing students to the libraries can help with their future research.

1. A Quick Introduction to the IU Libraries

Searching by Campus

Unfortunately, there is no way to search all campus libraries and databases at once. This guide will provide links for each campus. If you are having trouble accessing resources, first make sure that you are accessing them from your home campus' link.

OneSearch@IU versus IUCAT

There are two search engines used by IU Libraries: OneSearch@IU and IU Catalog (IUCAT). Although there are overlaps, each searches slightly different resources.

- OneSearch is better for digital resources (ebooks, articles, etc.) and is sometimes referred to as EBSCO Discovery Service.
- IUCAT is better for physical resources (books, physical media, etc.).

Future Additions

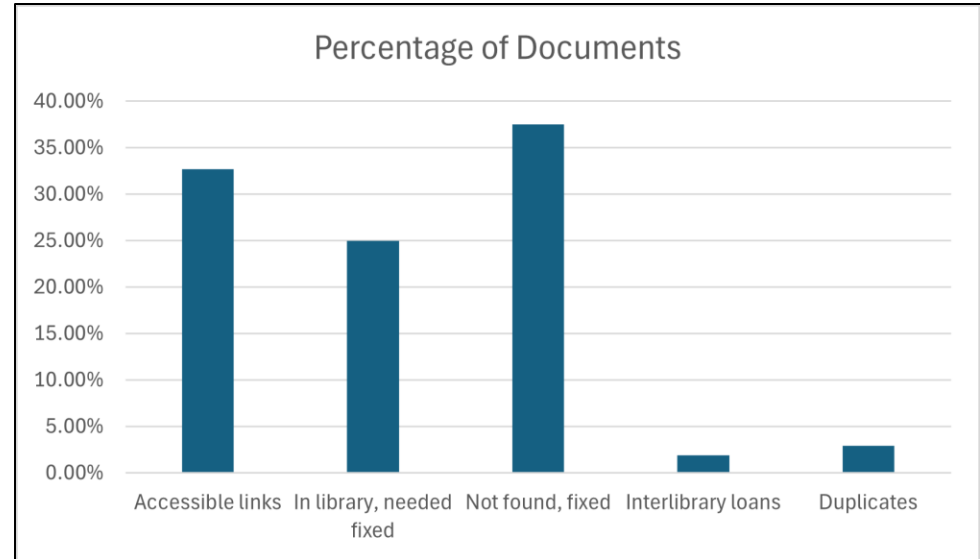
- Additional databases
- Multimedia databases/resources (e.g. Academic Video Online, Kanopy)
- Updates to accessibility info regarding Title II
- Customized versions for specific schools/programs

Project Results



Results At A Glance

- Total time spent: 218 hours
- Total documents: 104
- Accessible links: 34 (32.7%)
- In library, needed fixed: 26 (25%)
- Not found, fixed: 39 (37.5%)
- Interlibrary loans: 2 (1.9%)
- Duplicates: 3 (2.9%)



Project Deliverables

- Our project report highlighted the effort involved and the barriers we faced to upper management.
- Also created/updated:
 - PDF and Word guides
 - Flowchart for fixing documents
 - Library contact info and workflow for instructional designers

Data at a Glance

Time Spent

Note: As our processes were developed over the course of this project, we did not initially track time spent based on task type. Future remediation projects will use a new process with more specific time tracking (see [Suggested Process](#) in this document).

- Total time spent: 218h 32m
- Time spent on reporting and project management: 55h 30m
- Time spent finding links, remediating, and linking in courses: 163h 02m¹
- Average time spent per file: 1h 35m

Table 1: Breakdown of Document Types and Pages

The following lists the number of documents and pages based on the task required (linking, remediation, or requesting from database and remediating additional issues). Also included are the average, median and mode of pages for each task.

Category	Linked from IU Indy Library	Remediated	Requested from Database & Remediated ²	Duplicates	Total
# Files	34	64	3	3	104
% of Total Files	32.7%	61.5%	2.9%	2.9%	100%
# Pages	238	300	36	15	589
Average Pages	7	6	12	5	N/A
Median of Pages	5	4	14	4	N/A
Mode of Pages	3	3	14	4	N/A
% of Total Pages	32.7%	61%	2.9%	2.9%	100%

Reducing Barriers



Training Materials

- Plan for new learners.
- Aim for self-contained topics – can be adapted/added to later.
- Offer live sessions and recordings for those who can't attend.
- Short, step-by-step written guides work well (esp. with screenshots).

Deciding Whether an Image Needs Alt Text

Most images are provided in courses to present some sort of information, so most images benefit from alt text. This usually includes page banners, images relating to course content, and images used as links or buttons.

Essential Images

Page Banners

Intro: Scenario


Page banners provide navigational information to learners, such as the module the page is in. Alt text should duplicate this visual information. Usually, you can copy whatever text is on the banner image. For example, the image above has alt text of "Intro: Scenario".

Sometimes the banner also shows how far along the learners are in the module. In this case, ask your lead ID (if you have one) or message Caitlin for more information.

Content Images

Content images communicate information almost

Images as Links



Parts of Tables

Tip
Headers are for labeling tables;
headings are for text subtitles.

Row of 3 headers

Header 1	Header 2	Header 3
Data cell	Data cell	Data cell
Data cell	Data cell	Data cell

First column

Example table

Caption

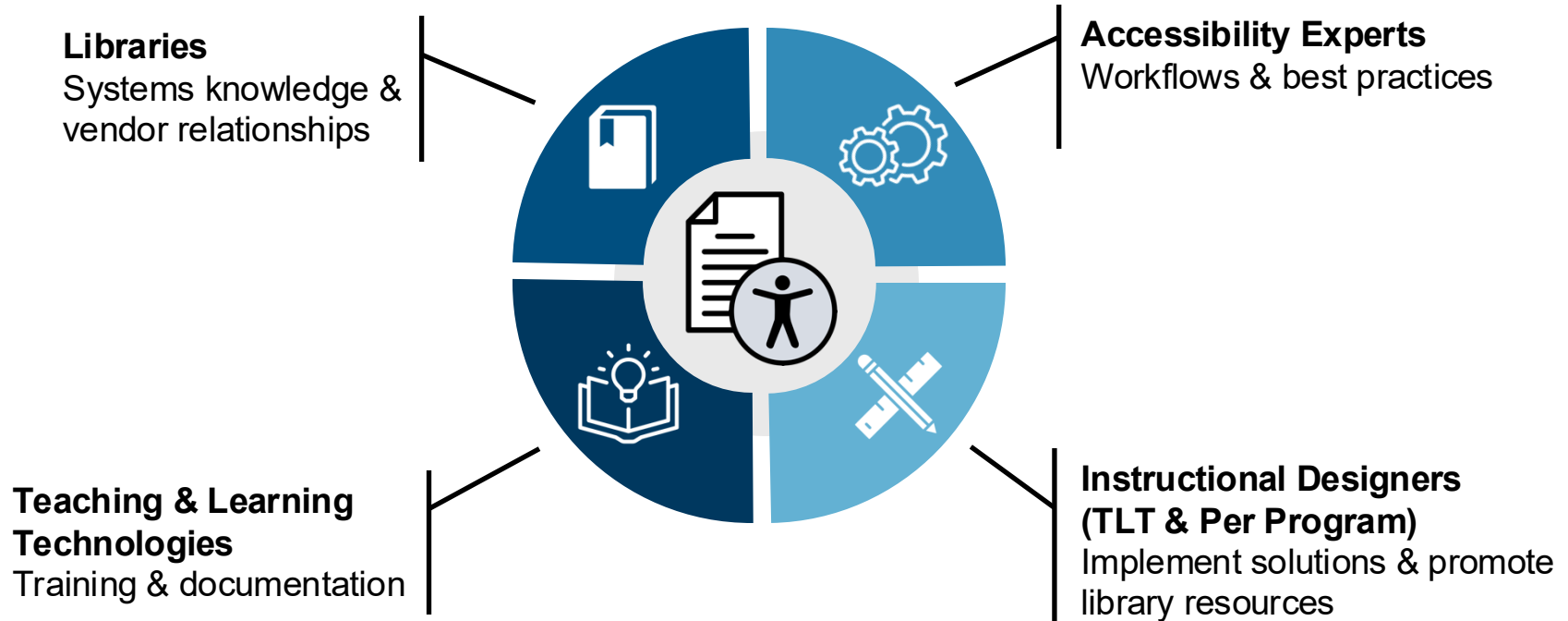
Advocacy & Procurement

Bring accessibility into the conversation.

- Ask vendors about their tool accessibility and limitations.
- If you can, choose new tools and databases that are accessible.
- Look for workarounds, but also communicate barriers.
- Look for opportunities to collect data on: file issues, hours spent, potential impact



Building Relationships



Tips for Building Relationships

- Start small! Little steps matter.
- Look for opportunities to save time, resources, energy for everyone.
- Seek to understand each others' perspectives and the overall system.



Takeaways

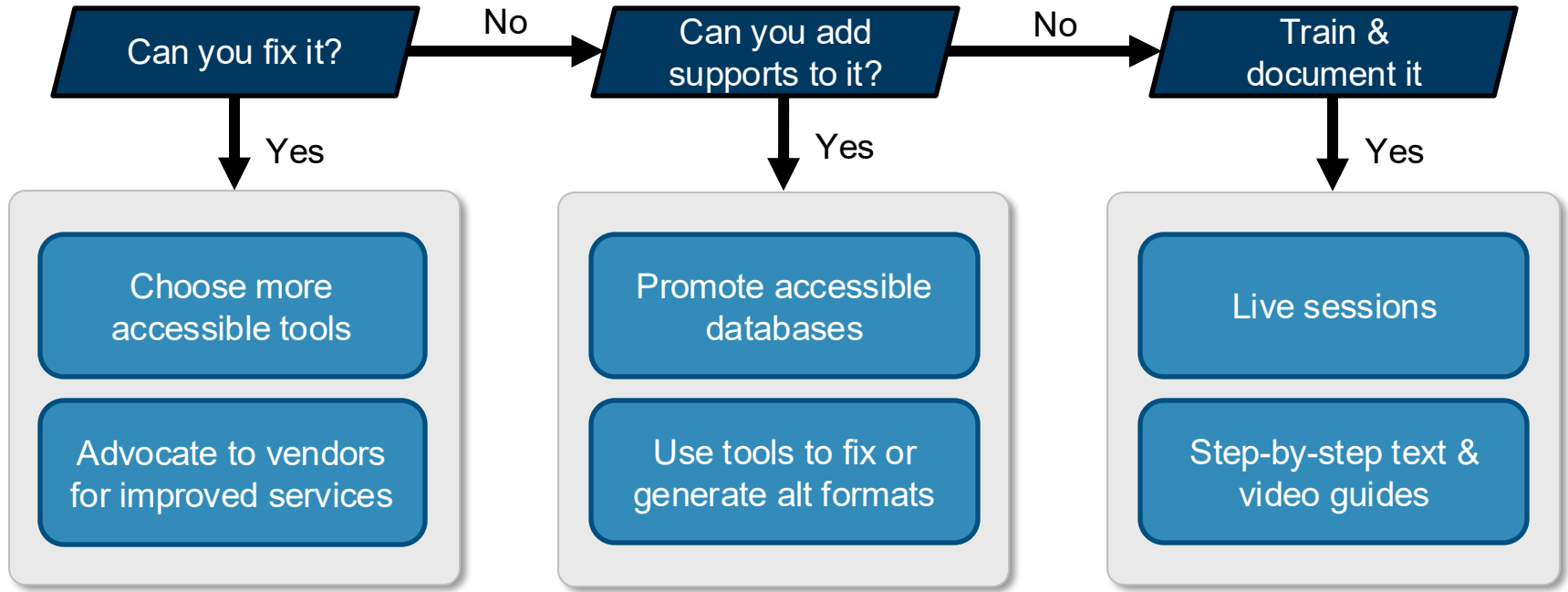


Tips: Identifying Barriers

- **Look for testers:** students, faculty, or other departments.
- **Identify choices:** How do you make the decision? What would someone else need to know?
- **Core knowledge:** What info is specific to the libraries that may need to be taught?
- What questions are you asked the most?



Tips: Addressing Barriers



More Resources

Guides & Links

- [TLT's Accessibility Guide](#)
- [Word accessibility](#)
- [PDF accessibility](#)
- [Image alt text \(WebAIM\)](#)
- [DIAGRAM center for complex images](#)

Software

- [Anthology Ally](#)
- [MathPix](#)
- [Pandoc](#)



Thank you!

Q&A Time

Connect with me:
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