



Implementing Web-Scale Discovery in an Academic Research Library

Usability Testing

- November 2008
 - Tammy Allgood, Web Services Librarian
 - Evaluation of library web site home page
- July 2009
 - Tammy Allgood, Web Services Librarian and Cindi Farmer, Provost Web and Publication Design Group
 - Evaluation of MyASU student portal search box

Interfaces Tested

ASU Home | ASU A-Z Index | My ASU

ASU Libraries Catalog | Research Databases | Course Reserves | Get Help

frustrated?
ask a librarian

The Library Char
Hayden Library Exhibit: West o
Watch the Presidential Inaugur
Changes made to fine paying p
Fletcher Library Exhibit: Migrat
Honor to Latina(o) Cultures an
The Labriola National American
(Video Podcast)
ILLIAD System Available Again
Wireless Laptop Printing Updat

Find Books & More
Search for books, media, and
other materials
KEYWORD

Find Subject and LibGuides
Guides to finding the best
resources on a subject or a
specific course
[Find a subject librarian](#)

JSED RESOURCES
Search Premier
JSTOR
LexisNexis Academic
MDConsult
Medline (Ovid)
Naxos Music Library
netLibrary
PsycInfo
PubMed
Refworks
Web of Science
Worldcat (OCLC FirstSearch)

FEATURED RESOURCE

More info

Architecture | Downtown Phoenix | Hayden | Law | Music

ASU Libraries, Arizona State University | P.O. Box 871006 Tempe AZ 85287 | [Maps and Locations](#) | Phone

Copyright & Trademark | Acces

Library

Find Articles

A simple way to broadly search for scholarly literature.
Academic Search Premier | All Research Database

Online Catalog | Course Reserves
My Library Accounts | Library Services for Students
ASU Libraries Locations | More Information

Methodology

- Participants were asked 4 questions about library research and then asked to complete 12 tasks.
- Tasks were written to simulate the types of information needs students have when coming to the ASU Libraries web site.
- The students were observed directly and asked to perform a cognitive walkthrough, verbally explaining their decisions as they attempted to complete the tasks.
- Completion of tasks are measured on the following scale:
 - Unsuccessful.
 - Successful with extra effort.
 - Successful.

Summary of Observed Behavior

- Users often go to "Online Catalog" first thinking it is searching *all* of the Library resources (and don't get results for journal articles).
- Users don't know what database to go to for articles.
- The research-savvy users who have past experience with Google Scholar found most things quickly.
- There is general user dissatisfaction with the distributed nature of library systems.

Comparison Criteria




























	Summon (http://www.serialssolutions.com/summon/)	WorldCat (http://www.worldcat.org/)	Google Scholar (http://scholar.google.com/)	Encore
Implementation time (workflow impact low/med/high)	Low implementation time (very little disruption in local workflows)	High implementation time (would be disruptive to BAMS workflows / workflows would have to be revised)	Medium implementation time	Medium implementation time
Comprehensive content coverage (high-med-low)	High content coverage	Medium content coverage	Medium content coverage	Medium content coverage
Licensed Content Negotiation & Contracts	Serials Solutions have our holdings (easy implementation)	Contracts/content must be licensed through WorldCat to be included in holdings search (high impact).	N/A	Some
Catalog integration	Would need to be indexed by Summon (part of 6 week startup time)	Most Records Already in Worldcat (no coverage of those that are not)	None	Yes
Programmatic access to data (API)	High	None	None	None
Privileged local content in search results (show local content first)	Yes	Yes	No	Yes
Allows local repository content	Yes	Records must be in WorldCat catalog	Available through crawling; inclusion through Google Scholar is unknown	Yes
Portal integration	Yes	No	No	No
Federated	No	No	No	Yes

Implementation Team

- Web Services Librarian
- Metadata Librarian
- Cataloger
- Head of Bibliographic and Metadata Services
- ILS Admin
- Media Production Manager
- Marketing Director

Implementation

- Purchased product
- Name/Icon Testing - September
- Library Staff Info Sessions - October
- Provost Committee Info Presentation - October
- Internal Beta Testing - End of October
- Beta Release - 11/11/09
- Post Beta User Testing - November/December
- Library Staff Training Sessions - January
- Full Release - 1/5/10

		Task Name	Start	Finish
1	✓	 Workflow Management	Tue 8/18/09	Wed 8/26/09
2	✓	Create Export Search	Tue 8/18/09	Tue 8/25/09
3	✓	Edit Current Cataloging Workflow to account for no del	Tue 8/18/09	Wed 8/26/09
4	✓	Remove item deletion permissions in millenium	Tue 8/18/09	Thu 8/20/09
5	✓	Set up workflow to run search, output Marc, and purge	Tue 8/18/09	Tue 8/25/09
6	✓	 Data Mapping	Tue 8/18/09	Wed 10/14/09
7	✓	Determine which records should not be included in Sum	Tue 8/18/09	Wed 8/26/09
8	✓	Map Marc Fields in Catalog to Summon Search Fields	Tue 8/18/09	Wed 9/2/09
9	✓	Map Locations	Fri 10/2/09	Wed 10/14/09
10		 Configuration	Sat 3/21/09	Fri 7/23/10
11	✓	Send Configuration Data to Serial Solutions	Sat 3/21/09	Mon 3/30/09
12	✓	Export all records	Tue 8/18/09	Wed 8/26/09
13	✓	FTP records to Serial Solutions	Wed 8/26/09	Mon 8/31/09
14		Index Content	Wed 9/9/09	Fri 10/9/09
15		Web Site Integration	Fri 9/18/09	Fri 10/9/09
16		Implementation of User Feedback	Tue 12/8/09	Mon 1/4/10
17		MyASU Integration	Wed 11/11/09	Mon 1/11/10
18		Toolbar Integration	Wed 11/11/09	Mon 1/11/10
19		Live Web Site Integration	Mon 1/4/10	Mon 1/11/10
20		Blackboard integration	Fri 6/4/10	Fri 7/23/10
21		Facebook Application?	Tue 2/9/10	Thu 3/25/10
22		LibGuides Widget	Tue 2/9/10	Mon 3/29/10
23		 User Testing	Mon 8/24/09	Fri 12/18/09
24	✓	Poll Users for new name for Summon Search Service	Mon 8/24/09	Fri 8/28/09
25	✓	Name/Icon Testing	Tue 9/15/09	Tue 9/22/09
26		Internal Beta Testing	Wed 10/14/09	Fri 12/18/09
27		Provost Committee Testing	Wed 10/28/09	Fri 11/6/09
28		Pre Beta User Testing	Wed 10/21/09	Fri 11/6/09
29		Post Beta User Testing	Mon 11/23/09	Mon 12/7/09
30		 Marketing and Promotion	Tue 8/18/09	Tue 8/3/10
31	✓	Create icon for new search service	Tue 8/18/09	Mon 9/14/09
32		Provost Committee Info Presentation	Wed 10/28/09	Wed 10/28/09
33		Library Staff Info Sessions	Mon 10/5/09	Fri 10/16/09
34		Viral Promotion	Mon 10/12/09	Wed 11/11/09
35		Full Release Campaign	Mon 1/4/10	Tue 1/12/10
36		External publications and presentations	Mon 5/3/10	Tue 8/3/10
37		Beta Release	Wed 11/11/09	Wed 11/11/09
38		Full Release	Tue 1/12/10	Tue 1/12/10
39		 Collection Savings	Mon 2/1/10	Thu 4/1/10

Rebranding Summon

all**Lib**
search

a**S**ul
search ASU libraries

the
box

shama
search

library
single
search

suma

the one
search
to rule them all

suma

Student Advisory Committee

- Voted for “Library One Search”
- Quotes from students:
 - “I find it hilarious that both Library Single Search and Library Multi Search are in the running...”
 - “Questions: Why won't every single item be indexed? What would be the point of a search box such as this if every single item is not indexed? Don't you think this will create a black hole of items that will never be used or accessed?”



Mobile Site

Ask a Librarian



- ▶ [About the Libraries](#)
- ▶ [Articles](#)
- ▶ [Books, CDs & DVDs](#)
- ▶ [Specialized Collections](#)
- ▶ [Services](#)
- [For Faculty & Staff](#)
- [For Students](#)
- [For Visitors](#)
- [Tutorials](#)

Featured Resource

New [mobile library site!](#)



One Search Journals Catalog LibGuides Google Scholar

library **One** search

Search Library

Library One Search retrieves many articles, books, and other resources from the ASU Libraries' collection. [About the Library One Search](#)

Subject and Course Guides (LibGuides)

[LibGuides](#) - Guides to finding the best resources on a subject or a specific course. [Find a subject librarian](#)

Most Used Resources

- [ABI/Inform](#)
- [Academic Search Premier](#)
- [CINAHL](#)
- [Dissertations & Theses](#)
- [Economist Intelligence Unit \(EIU\)](#)
- [ERIC](#)
- [Google Scholar](#)
- [JSTOR](#)
- [LexisNexis Academic](#)
- [MDCConsult](#)
- [Medline \(Ovid\)](#)
- [Naxos Music Library](#)
- [netLibrary](#)
- [PsycInfo](#)
- [PubMed](#)
- [Refworks](#)
- [Web of Science](#)
- [Worldcat \(OCLC FirstSearch\)](#)



Library Channel

New Fax Service at Polytechnic campus Library

The Polytechnic campus library is now offering fax service for library users. A convenience fee of \$1 per page will be requested for local numbers and \$2 per page for long-distance numbers. Please contact the Polytechnic Library at (480) 727-1037...

Event: 'Mapping' Indigenous Futures: Creating a Native Voice in Higher Education (Simon Ortiz and Labriola Center Lecture on Indigenous Land, Culture and Community)

Event: 'Mapping' Indigenous Futures: Creating a Native Voice in Higher Education The Simon Ortiz and Labriola Center Lecture on Indigenous Land, Culture, and Community Date: Thursday October 7, 2010 Time: 7:00pm Location: Heard Museum,...

Library Minute: ASU Libraries Goes Mobile

Do you have an iPhone, iPod Touch, Android, Blackberry or other mobile device? You can now use them to access the ASU Libraries wherever you go. In the latest the Library Minute we learn about the new mobile version of the ASU Libraries web site. ...

More news Library Minute

Newsfeeds RSS Events

Coverage Information

- Electronic Serial coverage is tricky to calculate...
97% of our 100 top accessed journals
- 91.28% of all electronic items with unique ISSNs
- <http://www.serialsolutions.com/assets/publications/Summon-represented-titles.pdf>
- “The Library One Search Searches most, but not all of our resources. If you are not finding what you expect or for a more comprehensive search, consult your subject librarian. They can assist you with other resources that are not included in the Library One Search.”

ASU Portal

ASU ARIZONA STATE UNIVERSITY ASU Home My ASU Colleges & Schools A-Z Index Directory Map | Tammy SIGN OUT

Search ASU **Search**

My ASU **My Info** My Profile

Employee Info switch to: Student Info **Help**

Tammy Allgood

Quick Links

- My Gmail
- My Outlook
- My Docs
- My Apps
- My Files
- My Sites
- My Stuff
- My Bookmarks
- Dashboard
- HRSA (People)
- Blackboard
- DARS
- Tools & Resources
- Library
- Transportation
- Financial Training

Announcements | News | Sports | Arts | State Press

- Green Office: Contribute from your cubicle
- Help those in need due to Arizona wildfires
- ASU presents high performance computing workshop
- New, improved ASU Help Center available

ASU Events | Academic Calendar | Holidays | Payroll Calendar

ns
s not apply to ASU Online

My Tasks

TO DOs:

- ASU Season Football Tickets

My Notes

- (Click here to add a note.)
-

My Employment

Time Payroll Benefits Travel Manager

- View Paycheck >
- Direct Deposit
- Job Openings > | HR Forms
- Tax Information >
- Personal Information >
- License/Certification

report your concerns. anonymously.
asuhotline

Teaching & Student Support Tools

- Faculty Activity Report
- Class Search
- Academic Catalog
- Refer a Student
- Clickers @ ASU
- EZAppt Advisor/Staff Access
- Grading Policies and Info
- Roster Contacts
- Blackboard Course Request
- Book Adoption Management

My Research

Library

One Search Journals Catalog LibGuides Google Scholar

library one search

Search Library

Library One Search retrieves many articles, books, and other resources from the ASU Libraries collection. [About Library One Search](#)

ASU Libraries [Archives & Special Collections](#)

[Journal Title Lookup](#) | [All Research Databases](#)

- Ask a Librarian
- ASU Libraries Catalog
- ASU Libraries Locations
- Course Reserves
- Interlibrary Loan
- Library Services for Faculty/Staff
- My Library Accounts
- Scheduling Videos for Classes
- Subject & Course Guides (LibGuides)
- Suggestion Box
- Library Website

Weather

Current	Today
93	108 81
Tempe, AZ	

http://library.lib.asu.edu/search/s

YSlow

Blackboard

[ASU Home](#) | [ASU A-Z Index](#) | [My ASU](#) | [Colleges & Schools](#) | [Directory](#) | [Map](#)

Tammy | [SIGN OUT](#)

[Blackboard Home](#) | [Courses](#) | [Organizations](#)

[Add Module](#)

[Module Administrator](#) | [Personalize Page](#)

Tools

- [ASU Blackboard Help](#)
- [View Grades](#)
- [ASU Libraries](#)
- [ASU Media Manager](#)
- [Personal Information](#)

My Calendar

No calendar events have been posted for the next 7 days.

[more...](#)

My Courses

Courses you are teaching:

- [LIB: Test Course](#)
- [Playing Pool Test 3](#)

Courses in which you are enrolled:

- [ASU Information Security Training - employees](#)
- [Adobe/Breeze Presenter Resource Site](#)
- [CPI 101: Introduction to Informatics \(2009 Spring A\)](#)
- [Information Security for ASU Web Developers](#)

Bookmarks

No items available.

ASU Libraries: Search

[One Search](#) | [Journals](#) | [Catalog](#) | [LibGuides](#) | [Google Scholar](#)

[Search Library](#)

Library One Search retrieves many articles, books, and other resources from the ASU Libraries collection. [About Library One Search](#)

ASU Libraries [Archives & Special Collections](#)

My Announcements

No Institution Announcements have been posted in the last 7 days.

[more.....](#)

Courses: Quick View

Courses you are teaching:

- [LIB: Test Course](#)
- [Playing Pool Test 3](#)

Courses in which you are enrolled:

- [ASU Information Security Training - employees](#)
- [Adobe/Breeze Presenter Resource Site](#)
- [CPI 101: Introduction to Informatics \(2009 Spring A\)](#)
- [Information Security for ASU Web Developers](#)

LibGuides

The screenshot shows the ASU Libraries LibGuides page for 'Library Research Made Easy'. The header includes the ASU Libraries logo and navigation links like 'ASU Home', 'ASU A-Z Index', 'My ASU', 'Colleges & Schools', 'Directory', and 'Map'. The breadcrumb trail is 'Library Home » LibGuides Home » Library Research Made Easy'. The page title is 'Library Research Made Easy' with a subtitle 'Some tips for doing effective library research'. It includes a 'Last update' date of Sep 14th, 2010, a URL, and options for 'Print Guide', 'RSS Updates', and social media sharing. A navigation menu contains tabs for 'Videos and Tutorials', 'Finding Topics', 'Finding Keywords', 'Using Connectors (And, Or, Not)', 'Research Starters', 'General Research Databases', 'Subject Research Databases', and 'Citing Sources'. The main content area is titled 'General Research Databases' and features a search bar and a 'Go' button. There are three main columns of content: 1. 'Library One Search' with a description of ASU Libraries' books and articles, a search box, and a 'Search Library' button. 2. 'Article Databases' with a list of databases: 'Academic Search Premier' (described as a great starting place), 'Finding Articles using Academic Search Premier/Ebscohost' (with a tutorial link), and 'Opposing Viewpoints Resource Center' (described as useful for topic selection). 3. 'Need Help?' with a link to 'Ask a Librarian' and 'Helpful Handouts' including 'Article Types Handout', 'Critically Evaluating Web Resources', and 'Online Search Tips Handout'. A fourth column on the left contains an 'Evaluating Resources Tutorial' with links to a 4:55 minute tutorial and 'Finding Articles Tutorials'.

Toolbar

The screenshot shows the ASU Libraries search toolbar. It includes a close button (x), the ASU Libraries logo, a dropdown menu for 'ASU Libraries', a search input field with a placeholder 'Keyword or ISBN', and a search button labeled 'Search ASU Library One Search'.

Marketing

Screenshot of the ASU library One search login page. The page includes the ASU logo, the text "library one search finally a serious research engine", a login form with fields for ASURITE UserID and Password, and a "Login" button. It also includes a "Need Help?" section with contact information and a footer with "Copyright | Acceptable Use | Privacy | ASU Home".

Internal Marketing



Usage

The screenshot shows the ASU Libraries website homepage. At the top, there is a navigation bar with links for ASU Home, My ASU, Colleges & Schools, A-Z Index, Directory, Map, and SIGN IN. Below this is a search bar with the text "ASU Libraries Site" and "ASU" and a "Search" button. The main navigation menu includes "All ASU Libraries", "My Accounts", "Hours", "ASU Libraries Catalog", "Research Databases", "Course Reserves", and "Get Help".

On the left side, there is a "Mobile Site" link and an "Ask a Librarian" section with icons for email, phone, and chat. Below this is a list of links: "About the Libraries", "Articles", "Books, CDs & DVDs", "Specialized Collections", "Services", "For Faculty & Staff", "For Students", "For Visitors", and "Tutorials".

The central area features a "Library One Search" section with a search bar and a "Search Library" button. Below this is a description: "Library One Search retrieves many articles, books, and other resources from the ASU Libraries' collection. [About the Library One Search](#)".

Below the search section is a "Subject and Course Guides (LibGuides)" section with a link: "LibGuides - Guides to finding the best resources on a subject or a specific course. [Find a subject librarian](#)".

Below that is a "Most Used Resources" section with a list of links: ABI/Inform, Academic Search Premier, CINAHL, Dissertations & Theses, Economist Intelligence Unit (EIU), ERIC, Google Scholar, MDCConsult, Medline (Ovid), Nexos Music Library, netLibrary, PsycInfo, PubMed, RefWorks, and Web of Science.

On the right side, there is a banner for "we have the resources you need to uncover, discover & learn". Below this is a "Library Channel" section with a "Feedback" link and a "Take survey" button. The feedback text reads: "Feedback: Wanted on Library One Search & Library Minute (Plus win prizes!) Do you love Library One Search? Laugh at the Library Minute? Don't know what we're talking about? Tell the ASU Libraries how you feel about these services and features by taking our brief survey. Even if you haven't heard of them, we want to know...".

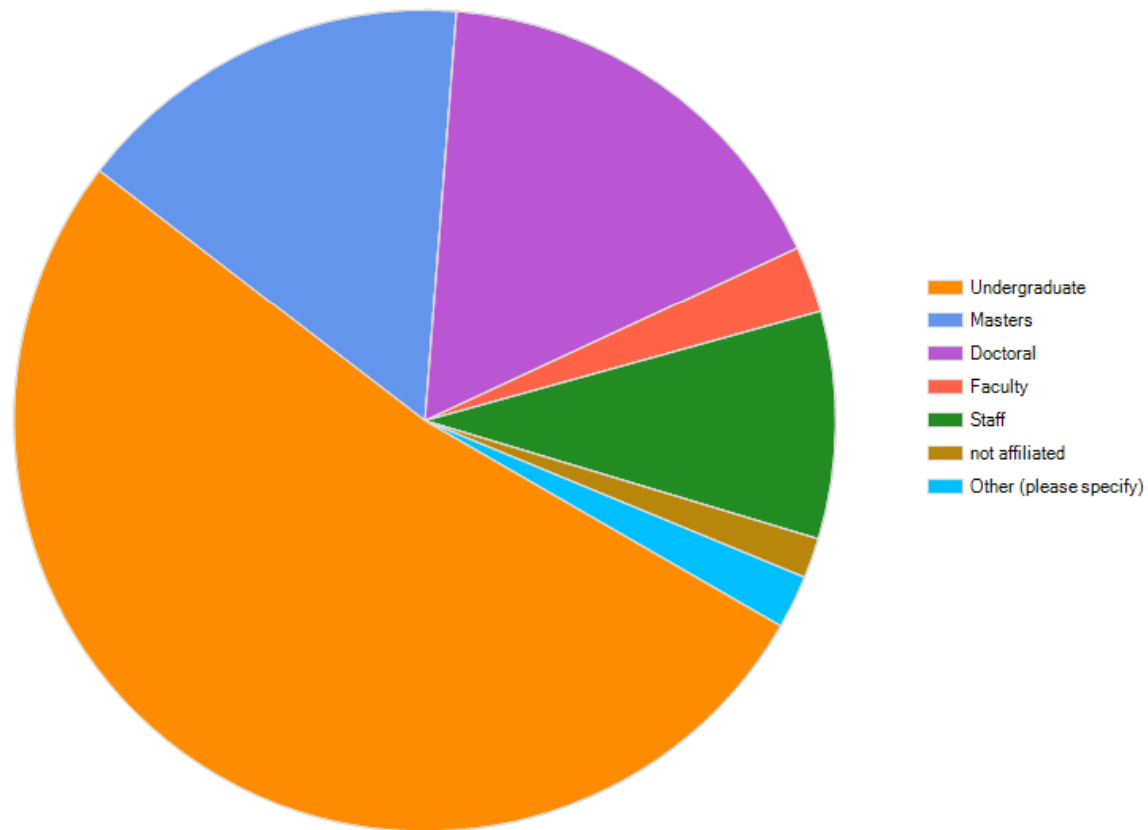
Below the feedback section is a "Featured Resource" section with a link: "New mobile library site!".

User Feedback

- Web Site Survey
- 190 users
- Incentive – book store gift certificates

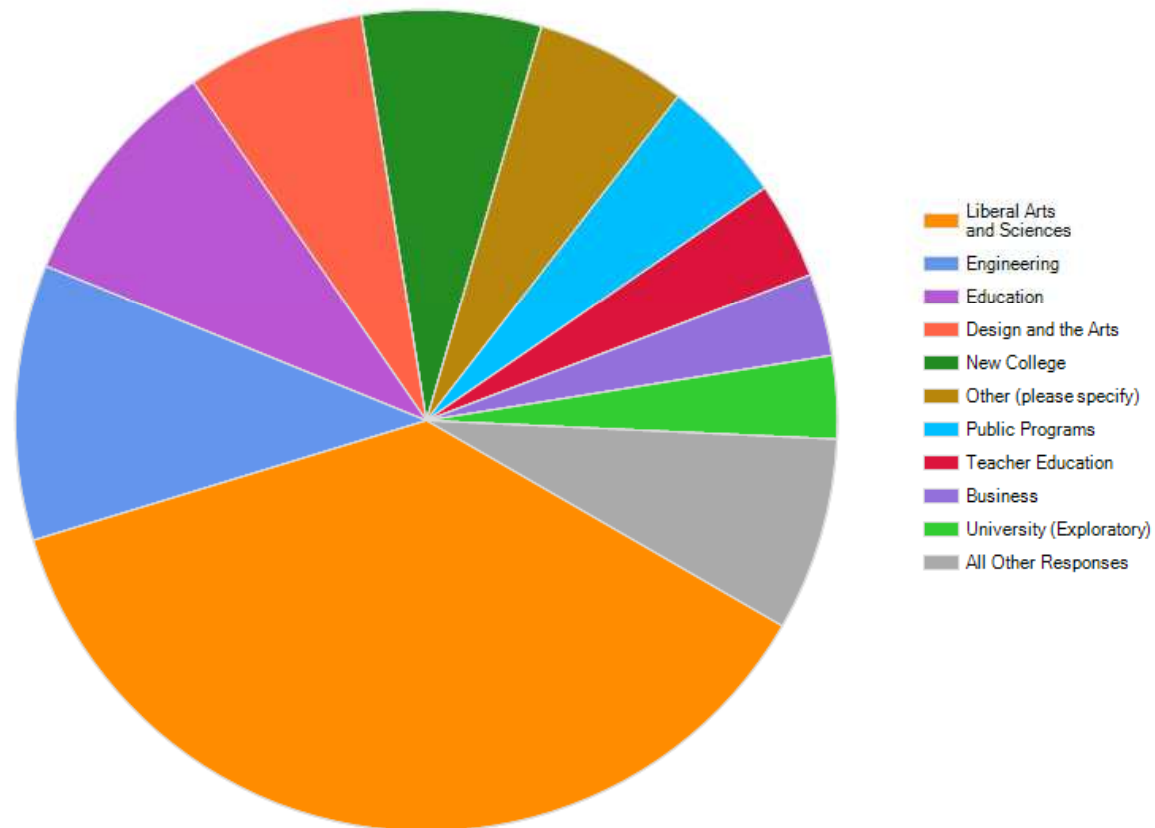
User Feedback

How are you affiliated with ASU?



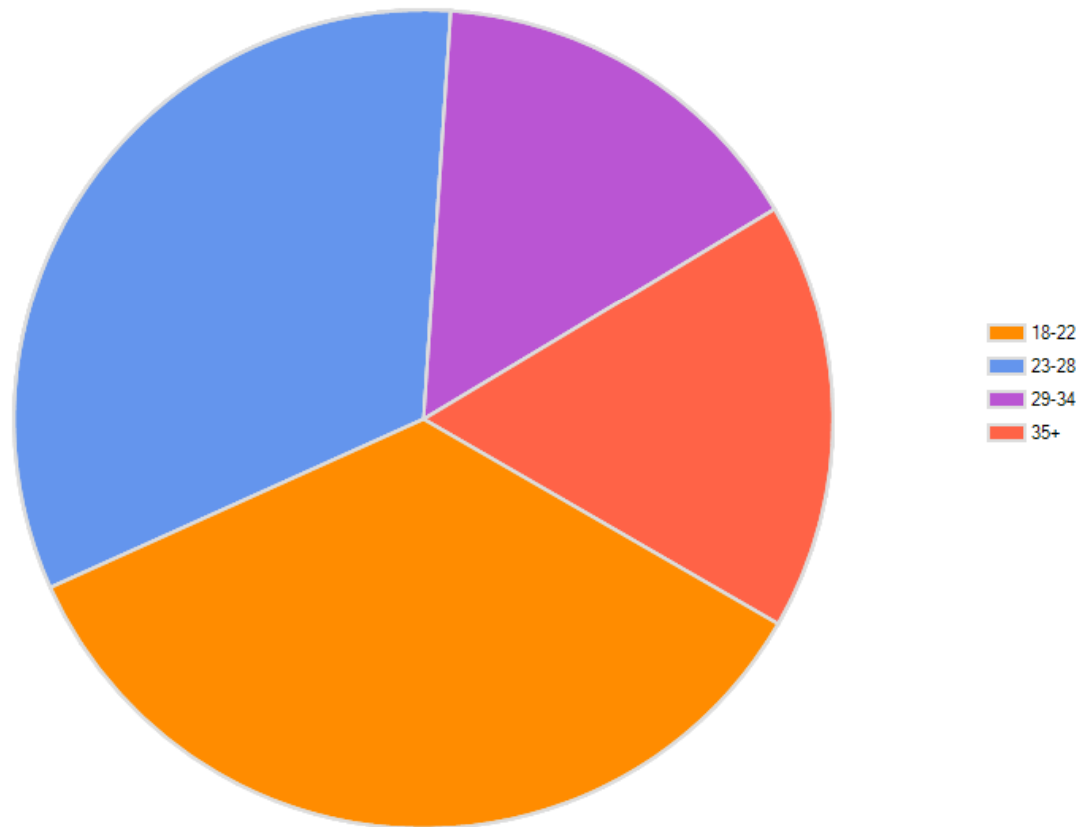
User Feedback

With which ASU college are you affiliated (e.g., your major)?



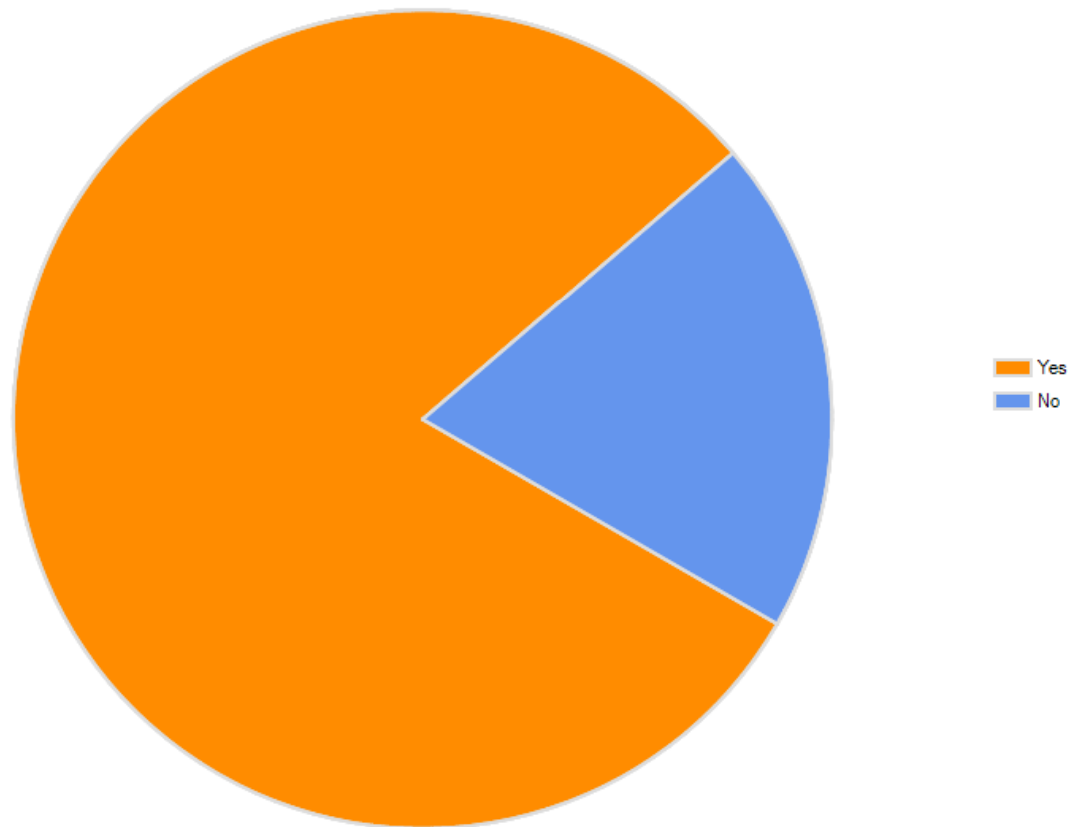
User Feedback

What is your age?

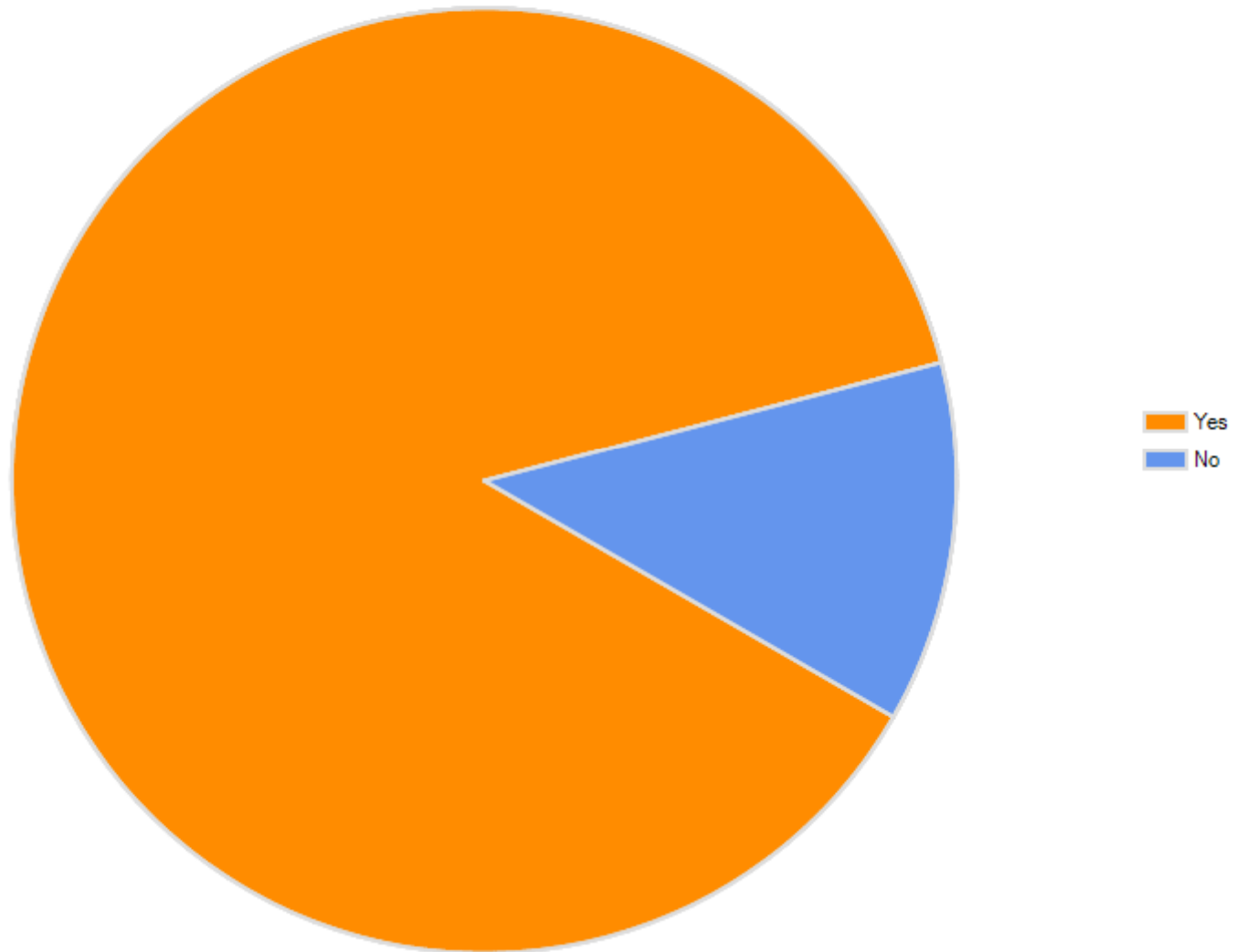


User Feedback

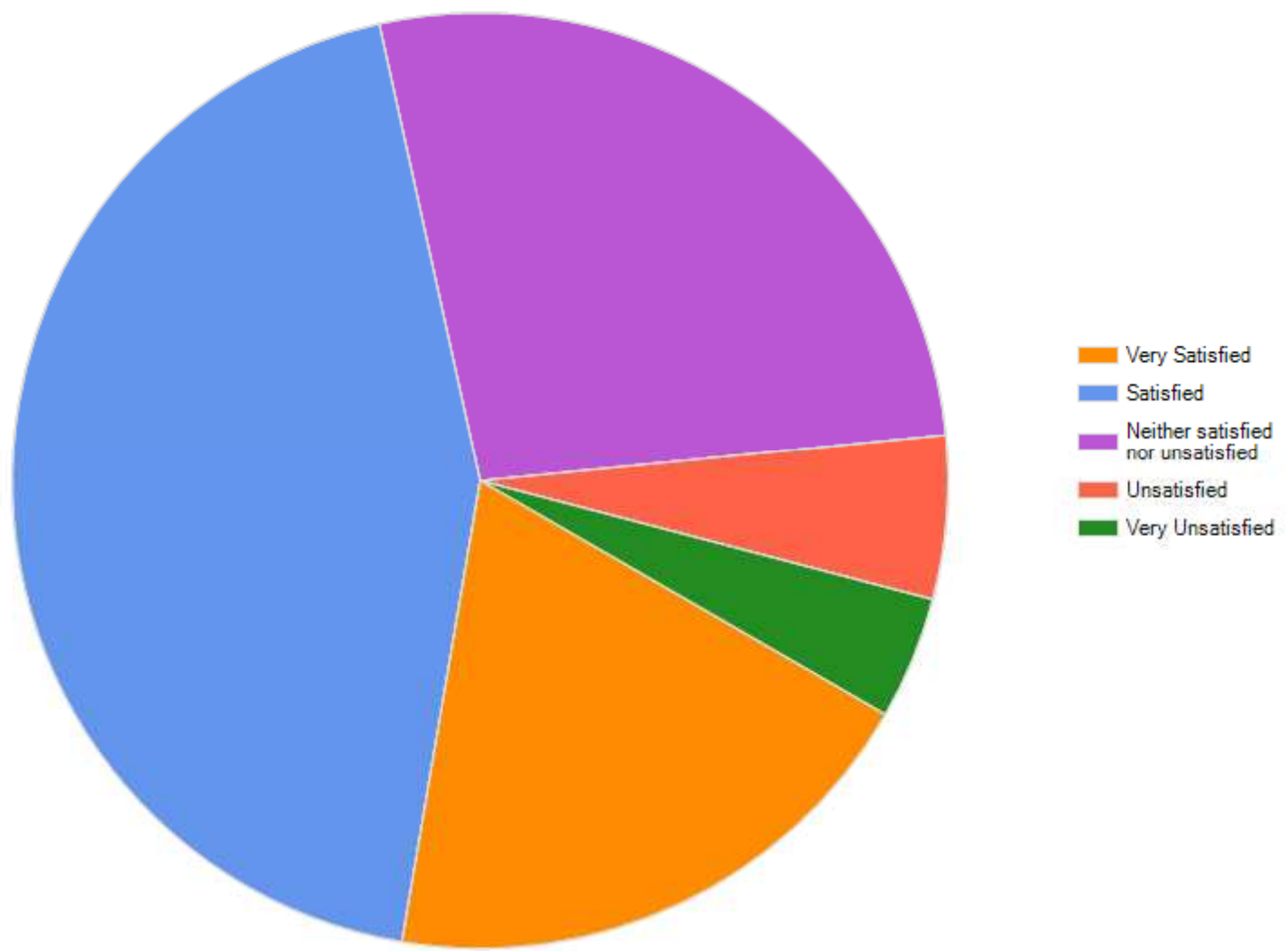
Have you used the Library One Search?



Is the Library One Search a positive addition to the current library services?



How satisfied are you with the Library One Search?



User Testing

The image shows a screenshot of the ASU Libraries website in a Mozilla Firefox browser window. The browser's address bar shows the URL <http://lib.asu.edu/>. The website header includes the ASU Libraries logo and navigation links such as "ASU Home", "My ASU", "Colleges & Schools", and "ASU Libraries Site". The main content area is divided into several sections:

- Mobile Site:** A link to the mobile version of the website.
- Ask a Librarian:** A section with icons for email, phone, and in-person assistance.
- One Search:** A search bar with a "Search Library" button. Below it, text states: "Library One Search retrieves many articles, books, and other resources from the ASU Libraries' collection. [About the Library One Search](#)".
- Subject and Course Guides (LibGuides):** A section with a link to "LibGuides - Guides to finding the best resources on a subject or a specific course. [Find a subject librarian](#)".
- Most Used Resources:** A list of resources including ABI/Inform, Academic Search Premier, CINAHL, Dissertations & Theses, Economist Intelligence Unit (EIU), ERIC, Google Scholar, JSTOR, LexisNexis Academic, MDConsult, Medline (Ovid), Naxos Music Library, netLibrary, PsycInfo, PubMed, PsycInfo, PubMed, Refworks, Web of Science, and Worldcat (OCLC FirstSearch).
- Library Channel:** A section with a "New Fax Service at Polytechnic campus LI" announcement and a "Library Minute" section.

Overlaid on the right side of the browser window is a GoToMeeting application window. The window title is "ASU Libraries - Mozilla Firefox" and it shows a "Screen Sharing" panel with a "Stopped" status. Below this, there are controls for "Show My Screen", "Stop Showing Screen", "Give Keyboard & Mouse", and "Change Presenter". There is also a "Start Recording" button and a "Attendee List" showing "1 | Max 16" attendees, with "TAMMY ALLGOOD (Organizer, Present...)" listed. The "Audio" section shows "Audio Mode" set to "Use Telephone" with a dial number "712-338-7126", access code "453-148-254", and audio PIN "66". The "Chat" section is empty. At the bottom of the GoToMeeting window, it says "Meet Now Meeting ID: 453-148-254 GoToMeeting®".

Results

- Currently collecting
- Obvious differences between students and faculty
- Future publication