

Teaching Primo to Every Student

Incorporating Primo Instruction into an Online Information Literacy Course



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Library 160 LibGuide: <http://bit.ly/isuprimoil>

Kris Stacy-Bates is a Science & Technology Librarian at Iowa State University. She teaches and serves on the curriculum planning group for the first-year information literacy course, which she took herself as a student at ISU. She co-chairs a committee on improving the local user experience with library discovery and liaises with several engineering and science departments. Kris enjoys “breaking” library databases by finding unusual problems with search results and displays. She is happy to provide suggestions on customizing and teaching Primo, coordinating library instruction with changes to resources, and yarn-bombing book carts.

Cara B. Stone is an Instruction Librarian at Iowa State University (ISU) where she works with the first year information literacy course and liaises with the School of Education; prior to joining ISU, she worked as the Coordinator of Information Literacy Instruction and User Experience Librarian at Grand View University. She has served in leadership roles in Iowa’s library associations and has presented at several conferences, including the Annual Conference on the First-Year Experience, the Council of Independent Colleges Information Fluency in the Disciplines Workshop, LOEX, and the Midwest Archives Conference Fall Symposium.

Erin Thomas is a Science & Technology Librarian at Iowa State University, where she teaches the first-year information literacy course, manages the library’s standards collection, and liaises with the departments of Mechanical Engineering and Materials Science and Engineering. It is her sincere hope that this work will endear her to our future robot overlords.

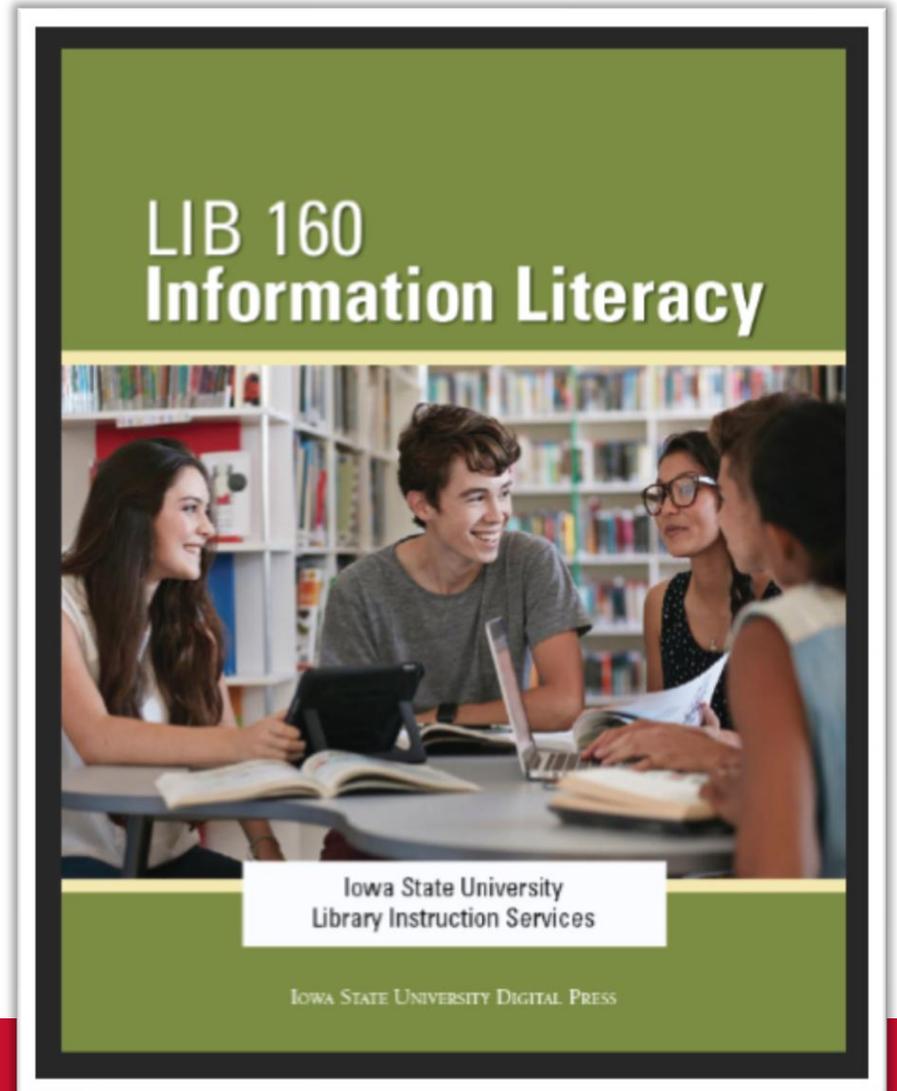
Iowa State University, Primo and Instruction

- ISU Library has used Primo since 2011, locally called Quick Search
- We teach Primo in course-related instruction and in our IL course, Library 160



Library 160: Information Literacy

- 1-credit course
- Required for all undergraduates
- Hybrid course with minimal face-to-face instruction
- Textbook and assessment pieces guide students through content
- Focus on transferrable skills rather than tool-specific step-by-step instructions



ISU, Primo and Instruction, and Library 160

- Since 2011, Iowa State University Library has used an implementation of Primo as its federated discovery tool and as its only public access catalog.
- Like other college & university libraries, we teach course-related instruction sessions that include an introduction to Primo
- Unlike many other academic libraries, we also teach a 1-credit IL course required of all undergraduates, **Library 160: Information Literacy**
 - Course is hybrid with minimal face-to-face contact so the textbook and assessment instruments have to stand alone
 - Our [online textbook](#) is open access & published by our digital press, quizzes and final are developed in the Canvas learning management system

Having a required IL course brings advantages

Student motivation

- Required to graduate
- Faculty expectations

In the learning management system:

- Quizzes and exam
- Tracking student progress

Later course-related instruction can be more subject-specific

LIB 160: INFORMATION LITERACY

(1-0) Cr. 1. F.S.SS.

Prereq: For students placed in ENGL 101: Completion of ENGL 101 requirement.

Eight-week course required for undergraduate degree. Provides a solid understanding of information literacy and the research process with emphases on finding, evaluating, and using scholarly information; the ethical and legal framework related to information use; and utilization of library discovery tools. To be taken as early as possible in the student's undergraduate career. See course descriptions of ENGL 150 and ENGL 250 for requirements related to LIB 160. Offered on a satisfactory-fail basis only.

Having a required IL course brings advantages – but there are other ways to get the advantages

Even when the course doesn't occur when a student most needs the info in their other classes, they are motivated to do the work because it affects their GPAs

- Though the course is pass/ fail, students who fail have a 1-credit F factored into their GPA until they retake the course and pass; students need to pass our class before graduating, though advisors encourage them to take it ASAP

A formal course structure means we can use the course management system to offer content and track student progress, but:

- We embed our content (our online textbook) within Canvas, rather than having to hope our students will go out onto a separate guide and hunt for our course content.
- We create & host tutorials in SpringShare's LibWizard and link those within the textbook.

We know they have a foundational understanding, which readies them for point-of-need delivery of instruction, and faculty expect them to have this foundation.

- Some CRIs can be set up with the course instructor so the library component affects course scores directly, or so students make the connection between using the library and doing required assignments better and more easily

LTI Integration

- We use LTI integration for library resources in upper-level classes (LibGuides) that call back to Primo experience/tools/strategies – instructors in other departments can just plug these modules into their Canvas sections

The basics are covered in Library 160 so course-related instruction can be very specific to disciplines and assignments

“Finding Library Materials” course module

- What does Primo search?
- Using **Advanced search** and **Tweak my results**
- Subject searching tips
- Using Booleans, truncation, etc.
- Locating physical materials

Where are the subject headings in this record? Click on the subject headings area in the image below.

Details

Title	Autodesk Inventor exercises : for Autodesk Inventor and other feature based modelling software / Bob McFarlane.
Author/Creator	Robert McFarlane >
Subjects	Engineering graphics -- Data processing -- Problems, exercises, etc > Engineering models -- Data processing -- Problems, exercises, etc > Autodesk Inventor (Electronic resource) >
Publisher	
Creation Date	
Format	
Notes	
Language	
Identifier	ISBN : 9781138849181

Good job!

1 / 1

“Finding Library Materials” course module – Ch 3. in textbook

What does Primo search and how best to search it

- Search strategies for Primo
- Start simple, then tweak
- Refining searches
- Identifying/using elements of the search results list
- Advanced search
- Examine an item record
- Drop downs and how they're helpful

Subject searching tips

General techniques

- Boolean in simple and advanced searching
- Nesting strategies
- Quotation marks
- Truncation

Locating physical materials

“Finding Articles” course module

- Using Primo to find articles
- Strengths & weaknesses of Primo for finding articles
- Interpreting citations and how to find various item types through Primo
- All chapters include guided practice in a variety of formats

Identify citation elements:

Chakrabarty, D. (2011). The Muddle of Modernity. *The American Historical Review*, 116(3), pp. 663-675.

Chakrabarty, D. is the article **author** ✓

The Muddle of Modernity is the title of the

journal ✗

The American Historical Review is the title of the

article ✗

116 is the **page** ✗ number

(3) is the **volume** ✗ number

663-675 are **issue** ✗ numbers



“Finding Articles” course module – Ch. 4 in textbook

Using Primo to find articles

- Tweak my results
- Availability
- Peer-reviewed

We address strengths & weaknesses of Primo for finding articles

- Contrasting Primo to find articles with specialized indexes or Google Scholar to find articles

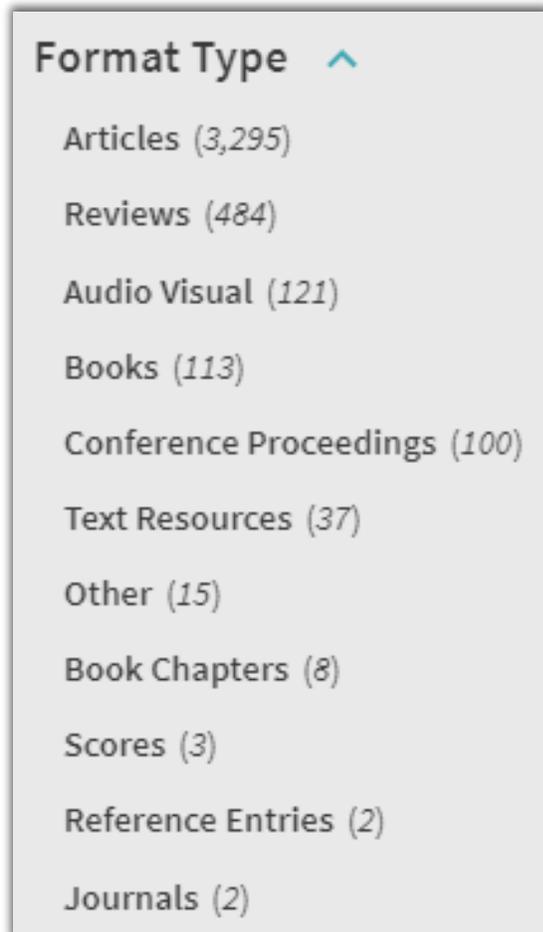
Interpreting citations and how to find various item types through Primo

- **The** resource to use to search our book holdings
- Many articles can be found at the article level, if not, try journal title & holdings before giving up
- We emphasize finding book-level info to find book chapters in Primo, as we often have more chapter-level info in records for print books than for e-books

All chapters include guided practice in a variety of formats

- Built into textbook
 - LibWizard, flashcards, drag/drop matching, put items in order, etc.
- Quizzes also function to guide students to actually do searches in Primo and see how that works

What we emphasize in teaching Primo



- Choosing a scope/tab/material type
- Choosing simple or advanced search
- Identifying the types of items in search results
- Facets – broadly, not specifically
- Finding materials once they are identified in Primo
- General approaches and skills, not exact step-by-step instructions

What we emphasize in teaching Primo

- Choosing a scope/tab/material type
- Choosing simple search or advanced search
- Identifying the types of items in search results
- Facets – we emphasize more that the facets are there and can be useful, and put less emphasis on knowing exact facet choices as these can change between scopes or over time
- General approaches and skills, not exact step-by-step instructions that may change

Challenging features to explain

- Selecting an online source from several choices
- FRBR groupings and display
- Multitude of ways to request items

Available at: [JSTOR Life Sciences Collection](#) 

Available from 1880 volume: 1 issue: 1.

Most recent 6 year(s) not available.

Available at: [JSTOR Health & General Sciences](#) 

Available from 1880 volume: 1 issue: 1.

Most recent 6 year(s) not available.

Available at: [American Association for the Advancement of Science](#) 

Available from 1997.

Available at: [Earth, Atmospheric & Aquatic Science Collection](#) 

Available from 1988 until 2005.

Challenging features to explain

- Selecting an online source when several are offered, and often getting better results by checking the full record vs. following full-text link from the brief display
- FRBR groupings and display. We mention that items are grouped with similar versions (FRBR), but don't discuss how the grouping happens, or distinguish this from de-duping records in Primo Central
- We have a wide variety of ways to request items – in library or checked out, partner library, ILL/DD, etc.

Changes to teaching Primo over time

- Ex Libris updates lead to instruction updates
 - New features or interfaces
 - New examples in textbook and quiz questions
- Reduced emphasis on particular techniques
 - Browse searching
 - Subject heading searching
 - Order of search terms / phrase searching
- Primo coverage for local resources

Changes to teaching Primo over time

- Many of our changes in which search strategies we emphasize and teach are due to updates made by Ex Libris to Primo, like the need to teach new features or interfaces
- When displays and search options change, we also have to change the examples we present, such as using new screenshots, picking example records to best demonstrate new search or display options, etc.
 - Local changes also impact the examples we use: customization choices for Primo, collection holding changes and shifting projects, circulation policy changes, full-text options for resources might change (rental collections, rolling embargos, etc.)
- We have de-emphasized approaches relating to subject standardization, due to the wide variety of indexing levels in records from Ex Libris. Some sources use author provided keywords, others use terms from a database's thesaurus. This is a big change from the days when we could teach that library catalog records all used a consistent subject list. We no longer teach browse searching in Library 160, and are reevaluating whether to teach subject heading searches at all.
- Changes to search algorithms mean we don't have to focus as much on the order of search terms, such as phrase searching or "starts with" to get the most relevant results first.
- Primo Central coverage – This has grown and improved in what is covered over time; fewer sources in Primo Central give wacky results; results are getting more accurate/aligned with search terms. Records from other database providers are becoming a little more likely to play well with Primo.
- Our use of Primo coverage for access to local resources and collections has grown over time. Local collections now indexed in Primo include electronic dissertations & theses, print standards, special collections materials, and others

Quiz question change example

Previous interface:

- One search box
- Field limit applies to all keywords

The screenshot shows a 'Quick Search' interface. It features a single search input field on the right with a 'Search' button. To the left of the input field are three dropdown menus. The first dropdown menu is open, showing a list of material types: 'All items', 'Books', 'Journals', 'Articles', 'Images', 'Audio Visual', 'Scores', 'Maps', 'Everything but articles', 'Library website', and 'All items' (highlighted). The second dropdown menu is open, showing search operators: 'that contain my query words' (highlighted), 'with my exact phrase', and 'starts with'. The third dropdown menu is open, showing search locations: 'anywhere in the record' (highlighted), 'as author/creator', 'in the title', 'in subject', 'anywhere in the record', 'in user tags', 'ISBN', 'ISSN', 'call number', 'bib number', and 'barcode'.

Current interface:

- No field limits in simple search
- Multiple search lines in advanced search
- Easier to see how to search keywords in different fields

The screenshot shows the current search interface. It features three search lines. Each line has a dropdown menu for the operator (AND, OR, NOT), a dropdown menu for the field (Any field), and a dropdown menu for the material type (Material Type, Language, Publication Date). The first line shows 'Any field' selected for the field and 'All items' selected for the material type. The second line shows 'AND' selected for the operator, 'Any field' selected for the field, and 'Any language' selected for the material type. The third line shows 'Any year' selected for the material type. There is a '+ ADD A NEW LINE' button at the bottom left.

Quiz question change example

- Our search structure for Primo used to be one search box with drop-down menus for item type, keyword arrangement, and field to be searched
- Students had a tendency to select a field to search, but then add keywords that didn't match that field, like looking selecting the subject field with search terms **calculus and Chen**, where Chen is the author
- We wrote a quiz question to emphasize that any field limit needs to apply to all the keywords in that search box
- With our current Primo interface, you can't limit to a single field in simple search, and the advanced search layout makes it more obvious you can search some keywords in one field and some in another
- We kept the quiz question addressing field searching in more than one field, but it's much less clear to students why it matters now; we'll probably drop this question after this term

Coordinating Primo administration & teaching

- Member overlap between groups
- Primo changes are usually scheduled between terms for consistency
- Often a textbook change is just one screenshot or sentence

Coordinating Primo administration & teaching

- We maintain some member overlap between our Primo oversight group, our Instruction Department, and our Library 160 curriculum planning group
- Primo changes are usually scheduled between terms
 - so everything is consistent through a single session of Library 160 –
 - and so functions don't change between CRI sessions and students' paper or project due dates
- Often a necessary textbook change is just one screenshot or sentence, so having a locally hosted online textbook we can fix small issues almost instantly

Adapting local instruction practice to Primo

Primo taught as a choice but not the only choice for finding articles

Consistent terms and names:

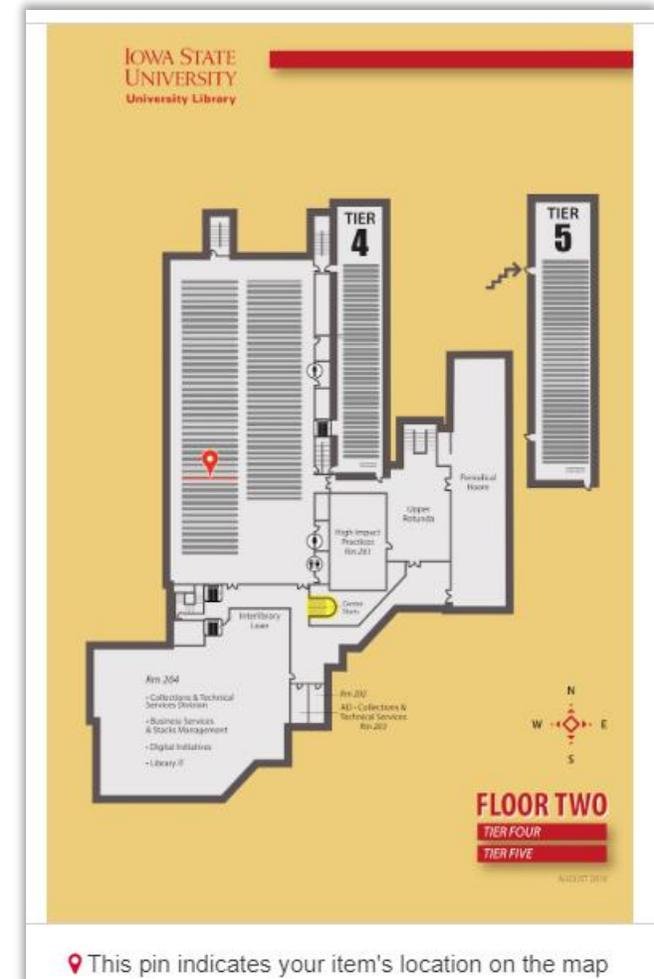
- only Quick Search for our patrons
- some use of "library discovery tool" in our class
- both Quick Search and Primo among staff

Adapting local instruction practice to Primo

- We teach Primo as a choice but not the only choice for finding articles. We teach Primo as a choice but not the only choice for finding articles; we also want students to be aware of subject-focused article indexes and Google Scholar
- We use consistent terms and names for Primo and its functions. We only call it Quick Search in instruction for our patrons, and we also use the more generic term "library discovery tool" in our Library 160 class. We call it both Quick Search and Primo among staff.

Adapting Primo implementation to local use

- **Simple search** selected as default
- **Expand My Results** button displayed, but not selected
- Plug-in that shows building locations
- Careful placement and descriptions of customizable functions



Adapting Primo implementation to local use

- Planning for instruction affects our choices about implementing Primo options & customization
- We selected **Simple search** as our default for simplicity and for a more usable library homepage
- Search results default to just to items that are owned or accessible locally. The **Expand My Results** button is displayed but not selected by default, so items not in full text are not in the search results without the patron choosing that option--the “what can a freshman get for her paper that’s due tomorrow” set of results.
- Location-within-the-library plug-ins have been very helpful for students, even though recent stack-shifting projects meant our examples needed constant updates.
- Carefully planning the placement and descriptions of customizable functions, e.g. partner library and ILL links and descriptions, report a problem form, etc.

Student assessment

- Quizzes provide assessment and motivation for hands-on practice
- Questions require students to do the searches, not just guess
- Final exam questions are self-contained, can't link to other web pages
- Assessment and evaluations

How do we know this is working? Student assessment

- Quizzes provide assessment and motivation for hands-on practice
- Questions are designed so students need to do the searches, not just guess
- Final exam questions are self-contained, a browser lockdown program means once the exam is started, students can't link to other web pages
- Analytics from Canvas show student progress
- Some instructors pre-quiz students at start of course
- Is this effective?
 - Session evaluations are generally positive
 - Students tend to indicate that materials are clear and understandable, quizzes enhanced learning, online course readings effective, confident in my ability to locate books and journal articles, information useful in future studies, challenged to learn more than I expected.
 - Agree – strongly agree
 - Students often come in for post-class consultations
 - Course pass rate tends to be 95-96%

Course-related Instruction and Primo

Example: Mechanical Engineering Design Expo

- Librarian meets with M E design classes early in semester, builds on Library 160 content
- Students present posters + prototypes at end-of-semester expo
- Students often share useful feedback!
 - How they found handbooks (equations), standards, etc. for their projects—and how excited they were about it
 - What they hoped to find and didn't—what to improve for next time

Course-related Instruction and Primo

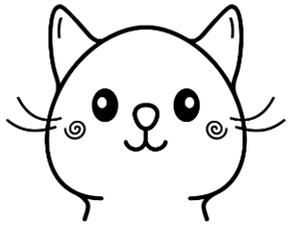
Is this effective? Outcomes are mostly anecdotal, but good anecdotes.

- Session evaluations
- Post-class consultations can help get a feel for what students got out of a session
- Look for unique opportunities for informal assessment, like student research presentations

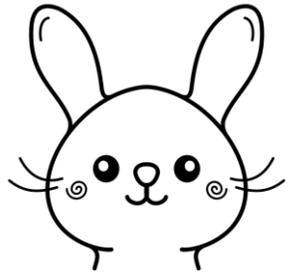
Example: M E Design Expo

- Librarian meets with mechanical engineering design classes early in semester, builds on L160 content including subject-specific Primo strategies
- Students present posters + prototypes at end-of-semester expo
- They often share useful feedback!
 - How they found handbooks (equations), standards, etc. for their projects—and how excited they were about it
 - What they hoped to find and didn't—which can inform what to improve for next time

Questions? Contact Us!



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Pet icons created by Olena Panasovska from the Noun Project