One of my favorite pieces of art pertaining to libraries and reading. This portrays people using the public library in Harlem, New York. Libraries are for everyone who wants to learn.
One of following two slides are used to welcome visitors.
Welcome to Your Library!

Bernadette A. Lear
Behavioral Sciences and Education Librarian
Penn State Harrisburg Library
(717) 948-6360
BAL19@psu.edu – happylibrarian76@AIM

Fall 2015 library hours:
Monday-Thursday: 7:30 a.m. – 11:00 p.m.
Friday: 7:30 a.m. – 9:00 p.m.
Saturday: 10:00 a.m. – 6:00 p.m.
Sunday: 2:00 p.m. – 11:00 p.m.
AIM: pshefdesk

Late night chat: http://www.libraries.psu.edu/content/psul/ask.html

Title slide for this presentation. It includes Bernadette Lear’s contact information (717-948-6360, BAL19@psu.edu), the library’s hours, Harrisburg’s IM address, and the library system’s web page for getting help.
An alternative title slide, which Bernadette Lear uses when teaching PreK-12 students and community organizations. Includes Bernadette’s e-mail address, BAL19@psu.edu.
This section of slides covers Harrisburg library’s staffing and building information.
Bernadette Lear covers Education, Psychology, Sociology, Nursing, and other social sciences. In addition to Bernadette, there are 3 other research faculty at Penn State Harrisburg Library. Each has a degree or extensive experience in his or her subject area – Eric for the sciences, Glenn for Business and Public Affairs, and Heidi for Humanities.
The library has other public services staff that can help, too. Everyone can answer basic questions about the library’s borrowing rules, opening hours, and policies. On top of that, each staff member specializes in a certain functional area.
In case you missed it, here is the library’s hours and contact information. The best phone number to call is 717-948-6070. There is always someone at that desk whenever the library is open.
If you can’t get any peace in your apartment or college dorm, the Library is the one place you can find it. If you need to get away from roommates, parents, X-Boxes, the phone, your cats and dogs, your comfy bed – whatever. For many people, the library is an “office away from the office” – a place you can work while you wait for class. We have more than 700 seats, 150 computers, and the entire building is wireless. Bring your laptop!
Penn State has more than 20 libraries spread throughout the state. PSU students can visit, use, and borrow items from any location, and all locations have the same access to databases and other online resources. Together, we are the “University Libraries” system.
This is an alternative slide for non-PSU audiences. Although the library’s services to non-Penn Staters are limited, we do allow Pennsylvania residents to borrow books and get research help at any location. Any resident of Pennsylvania can borrow up to 100 books and keep them up to 28 days!

**Community Resources**

- Same at all PSU campuses
- Free borrowing card
  - Must be an adult resident of PA
  - Up to 100 items / 28 days
- “LIAS Express” on-site database access
- Research assistance
This section of slides is for undergraduates in English composition classes, and for community members who are interested in the variety of resources at Penn State’s libraries. We have books and databases on every subject, from History, to world news, to business, and more!
Here is the library system’s home page, http://www.libraries.psu.edu. Most of the library’s research resources are available by clicking on the links inside the blue box. LionSearch (circled) is the “Google” of the library system. It searches many, but not all, of the library’s resources with a click on of the button.
The library has many cool resources. Since Bernadette Lear is a historian, she uses “APS” – American Periodical Series – very heavily. APS provides full-text copies of 19th century magazines and periodicals. It is a great resource for topics like the Civil War.
As you can see, APS has many articles about Theodore Roosevelt, written during the time of his presidency.
Another favorite resource is “Access World News,” which includes hundreds of newspapers from around the world.
Access World News includes many Pennsylvania newspapers, too.
For business tycoons, there is “Value Line,” which provides a lot of statistics about companies’ finances.
Here is Value Line’s report on Hershey. At a glance, you can see how Hershey’s stock price has risen and fallen, whether it is a safe investment, how much debt the company owes, and more.
Alumni Resources

- Must be a member of PSU Alumni Association
- Free access to EBSCO, JSTOR, Project Muse, and business databases
- See library’s alumni page, http://alumni.libraries.psu.edu/

This slide and the next slide are alternatives for alumni. The library does provide limited, at-home database access to PSU alums. To tap it, you must be a paying member of Penn State’s alumni association.
Here is the Alumni Library web page, http://www.alumni.psu.edu.
In college, one important goal is to increase your information literacy – your understanding and ability to navigate the huge world of information that you encounter on the Internet, on TV, in the workplace, and everywhere else. The next few slides describe some important information literacy concepts.
As you transition away from school and enter the working world, there are essential six “big ideas” that you need to understand. The follow slides explain each one.

Six Big Ideas

- Research is inquiry
- Searching is strategic exploration
- Information creation is a process
- Scholarship is a conversation
- Authority is constructed and contextual
- Information has value

From the ACRL Information Literacy Framework, http://www.ala.org/acrl/standards/ilframework
First of all, research is inquiry – it is about asking and answering questions to build your expertise on a topic, rather than simply completing an assignment. As you find information to answer your initial question, and you think about that information, new questions are likely to unfold, and thus you’ll have need for additional information. Learning through research is an ongoing effort that requires persistence and an open mind. It is similar to climbing a never-ending staircase.
2). Because research is something that you will have to do throughout your career, and because you will be seeking answers to a number of complex questions, you need to be strategic in how your search for information. Depending on the question, you might have to use different information resources – people, statistics, books, web sites, and much more. For instance, if you want to know the number of people who suffer from breast cancer, you can probably find that number on a web site from the American Cancer Society or the Center for Disease Control. But, if you want to know details about the effectiveness of cancer drugs such as tamoxifen, you may need to read medical trials published in scholarly journals.
Thirdly, creating information is a process. There are different processes – different audiences, different types of effort, different quality controls, and other differences -- imbedded in the type of information you use. And you have to pick information sources that are processed in a way that your group expects and respects. For example, biologists are typically trained in colleges, earning BA, MS, or PhD degrees to certify their expertise. They often work in laboratories and often conduct experiments or observations using certain standardized chemicals, equipment, and tests. When they learn something new, they often present it at a conference, or publish a paper in a journal. On the other hand, people who collect iron-on patches, like Bernadette does, develop their expertise by buying patches on eBay, at flea markets, at museums, etc. They don’t write in scholarly journals. Instead, they talk informally to other collectors about their collections. Sometimes they e-mail or blog. People build their reputations as collectors based on the size and variety of their collections, their helpfulness to other collectors, etc. In other words, biologists and iron-on patch collectors create information in different ways.
4). When you write or communicate what you’ve learned – be it through a paper written for a class, a proposal written for your boss, or a presentation to a client, or a discussion with someone who has the same interests as you – you are adding your own voice to a conversation. You’re entering into a debate where there may be a number of different viewpoints rather than a single answer. Also, there may be unknowns – questions that no one can answer yet. There are certain etiquette, rules, and vocabulary to these conversations. Your own etiquette and vocabulary might steer you toward or away from certain conversations. To give just one example, in the college setting and in scholarly work, it’s important to cite ideas that aren’t completely your own, but in everyday conversation with friends or coworkers, you don’t typically do that
Fifth, authority or expertise varies depending on the context. In a hospital setting, for example, the doctor is an important authority on diagnosing a patient’s condition, and prescribing treatment. However, he or she isn’t the only authority. The nurses who care for the person on a daily basis may have a better understanding of the patient’s symptoms, how well treatments are working, training the patient to do the treatment correctly, etc. The patient and his or her family have insights on the person’s level of pain, her/his history of disease, its psychological effects, and more. All these different types of expertises have to be weighed and have an appropriate place.
6). Finally, information has value. It’s not only educational or “good to know,” but helps us make important real-world decisions. Information can be bought and sold like any other product, and economics often influences who has access to it and who doesn’t. For example, Penn State is one of the richest locations in the world in terms of the number of books, databases, and other resources that we have access to. When you leave Penn State, your workplace probably will not have so many resources. So, it’s always important to ask what you currently have at your disposals, versus what exists out in the world, and how you can tap those other resources if you need them.
This section of slides concerns the research process.
This diagram shows one way of visualizing the research process. As said previously, research is inquiry, and is often an ongoing process – especially for large projects, such as theses. As you can see, research involves understanding the assignment, choosing research topics, choosing research strategies and information sources, searching, reading, thinking, writing, and evaluating what you’ve found. These steps need to be repeated as new questions unfold.
Another way to visualize the research process is by using a checklist. This approach is popular with undergraduates, or students working on short-term projects.

Research Checklist

- Understand your assignment
- Choose a topic
- Identify a research strategy
  - Involves sources of information, AND search techniques
  - Librarians can help with this! 😊
- Find basic facts in encyclopedias and books
- Find more details in journal articles and web sites
- Evaluate the quality and usefulness of your sources
- Write an outline and 1st draft
- Research to fill “holes”
- Revise, final draft

For more information, see Penn State’s “Research Project Calculator” at:
http://www.libraries.psu.edu/psul/tools/widgets/rpc_instruct.html

All of this requires active thinking!
Where should students begin their research? The answer is: it depends! Strategy depends on how much the student already knows, and what he or she wants to learn. Encyclopedias help to establish basic facts and to expand your vocabulary on a topic. This is essential before research your topic in other sources. On the other hand, journal articles are written for experts, by experts. They are usually the last thing to read, after you’ve consulted encyclopedias, books, and the Internet.
It is a lot easier to write, and to avoid plagiarism, if you have many information sources. The more information “pieces” you have, the more different ways you can combine them to build an interesting and solid argument. It’s a lot like playing with Legos.
Success in research doesn’t just depend on time and resources – having the right attitude is key. Critical thinking, thoroughness, and perseverance are important. Luck also helps! A database cannot do the thinking for you.
This section of slides are sample “cases” that Bernadette Lear sometimes uses when teaching students how to use library resources. She especially uses them when students don’t have a research topic, or if the students want to work together as a group. Each case has an information problem, and students use databases to search for answers.
A research case study for Education students. Imagine that you have a student in your classroom that has dyscalculia. What is this disorder, how does it impact the child’s learning, and what can you as a teacher do to help? Can you find answers in the books and journal articles available through the library?
A research case study for Health Education and Nursing students. Imagine that you encounter a woman with Crohn’s disease who has a lot of questions about how it might affect her family. Can you find answers in the books and journal articles available through the library?
A research case study for Psychology and Sociology students. Imagine that one of your clients or coworkers is getting a divorce, and is concerned how the divorce might affect her children. Can you find answers in the books and journal articles available through the library?
The next few slides illustrate some of the intellectual work you need to do – things to think about – while you are doing research.
Depending on your research topic and goals, there are many different types of information you could use. Although most professors focus on research articles, encyclopedias and books can give helpful, basic facts. In our digital world, images, videos, music, the Web, and other people are becoming increasingly helpful sources, too.

**Some Sources of Information**

- Encyclopedia / handbook
- Book
- Review article
- Practice / “ten tips” article
- Facts / figures (dictionaries, statistics, etc.)
- Primary sources (letters, diaries, observations, surveys, etc.)
- Research article (“IMRAD” format)
- Images and videos
- Music and audio recordings
- Web sites
- People (interviews)
Before you choose a database and start typing, sit down with a piece of paper, a whiteboard, or your computer and think about your topic. What other words can you use to describe it? Does your topic have important pieces? What other topics relate to it? For example, there are many different ideas and words related to HIV/AIDS. There are specific populations that are of particular concern, such as drug users. There are prevention strategies, such as abstinence or condoms. Thinking about your topic can help you think of more words to use in your database searches.
Another thing to think about is language you use in your searching, especially if you are using a database that covers a different discipline or profession than your own. As this slide shows, different professionals use different terminology when referring to the same thing. For instance, there are many different ways to say “teen” – if you are a psychologist, you would use the word “adolescent,” whereas law enforcement would use the word “juvenile.”
The next slides discuss the technical aspects of library research.
The five items on this slide are the ones that Bernadette usually emphasizes most in class. Your Penn State login and password are the keys to unlock a world of knowledge. It is the same login that you use for ANGEL, eLion, and other PSU web sites. It enables you to access the library’s databases from home, work, or anywhere. Finding books in the CAT, and using databases to find journal articles, are two other important tasks, as is utilizing the web, statistical resources, government reports, and other electronic resources. Finally, Penn State’s interlibrary loan service enables you to borrow items from other universities.
Librarians use the word “database” a lot. That is just a generic word that describes an search engine that helps you find information. Most library databases contain article or book listings, and most focus on a specific subject, like Education or Psychology. But some databases contain government reports, web sites, statistics, video, and other formats of information. What you are able to find in a database depends on the person or organization that compiled the database – no database includes “everything” on its topic. Another important thing to understand is that libraries do not create most of the databases they offer. Instead, they purchase access to them, and allow you to use the library’s subscription.
If you are looking for books, the CAT (library catalog) is your most important resource. It is a database that lists all the books owned by Penn State’s libraries, as well as videos and other materials (but NOT individual journal articles).
Penn State’s CAT allows you to search by keyword (topic), title, or author. You can also limit your search to a particular library location or date.
There are several ways to find articles. Which one is the most efficient? It depends! If you have a topic, and you want to search across many journals, you should use a database. But if you want to read one particular journal, such as American Educational Research Journal, Penn State’s e-journal list is faster.
Every database has different features, so take a close look before you start typing! A database may offer a thesaurus to help you figure out the best wording for your search. It may also provide ways to limit your search by date, scholarliness, or other factors.
Here is a typical database screen – this one is Academic Search Complete. Note that the database normally searches for keyword, but you can change the “Select a Field” option to search for titles, authors, or subjects. You can also use the database’s search options to narrow down by date, language, and other features.
When you are typing your search, you may combine your search words using “AND,” “OR,” and “NOT.” These words, when typed in capital letters, tell most databases that you want to find articles that have both, or one of, your search words. For instance, “women AND HIV” will find only articles that mention both the word woman, and the word HIV. On the other hand, a search like “women OR female OR girls” will find all the articles that mention the word women, plus all the articles that mention the word female, plus all the articles that mention the word girls.
This slide shows how you can use a database’s special features to pinpoint articles on your topic. Imagine that you are interested in children with autism, and you are especially interested in their mathematical ability. If you simply type in “autism,” you will find tens of thousands of journal articles. However, if you add “math” to your search, limit yourself to scholarly journals, and choose articles that were published from 2000 to 2015, you will find more that are on target.
Here is an example of a database’s results list (this one is for articles on autism and math, from the database Academic Search Complete). As you can see, the database tells you the title, authors, source, date, and pages. If you click on the article name, you will also find an “abstract” (summary) of each journal article. By clicking on the “cited references,” you can find older publications that the current author used in his or her article.
Penn State purchases online versions of many journals, and you can access them by clicking on the blue “Get It” button in a database. However, if you cannot find an online copy in Penn State’s system, you may be able to find one through Google. Or, you may be able to borrow a printed copy from Penn State Harrisburg Library or from another campus through ILLiad, Penn State’s interlibrary loan service.
Sometimes students ask whether it’s best to use Google, LionSearch, or a subject database. It really depends on your needs. Each resource has benefits and drawbacks. In general, Google Book Search or Google Scholar is best if you only need a few books or articles and you need to find them quickly. However, you will be expected to use subject databases if you are working on a major paper, because it is within them that you’ll find the research done by people in your specific profession.
The next set of slides provides tips on determining the quality of the information you have found.
The whole point of evaluating information is quality control. You have to be selective in choosing which articles, books, and web sites you are going to include in your research, and you have to be very careful in how you’ll use them.

Evaluation isn’t about determining whether a resource is “bad” or “good”. What you’re really doing is weighing the information you find against the needs of the project you’re working on. Even the most accurate web sites, written by recognized scholars and organizations, may end up not suiting your needs.

Boiling evaluation down to a few major topics, the next slides discuss:
-- Responsibility
-- Point of reference
-- Timeliness
-- Verifiability

At the center, though, is YOU.
“Author,” “publisher,” “sponsor,” – this all gets down to “who wrote this thing”? It’s probably the single most important aspect of evaluating an article, book, or web site. If a web site is anonymous – if the writer won’t put their own signature on the bottom line – what he or she may be saying is “I don’t want to be accountable for what I’m writing,” or he/she isn’t encouraging you to have a dialogue with them about it. Don’t trust anonymous publications!

The author of the page is the person who actually wrote the content (information). This is usually different from the editor or webmaster – which is the person who invites authors to write for a book, and the web master stylistically designs the page and updates it at the author’s request. Ideally, articles, books, and web sites will give the name of the person who wrote the content.

Another important question to ask about an author is, what is his/her background? What makes him/her an expert about this particular topic? Does he/she have an advanced degree in this topic? Does he work with the topic every day as a government official or as a leader of an organization that works with this issue? If you want to learn more about an author, look for biographical information in the article, book, or web site site itself, or, you can “google” the person’s name to see if other people on the Internet have used or mention his/her work. If that fails, you can check the person’s name in a book like “Who’s Who in the East,” “American Men and Women of Science,” or another biographical reference. You can also check names in “Science Citation Abstracts” or “Social Science Citation Abstracts” – two databases that Penn State’s Library subscribes to -- to see if he/she has published anything else on the topic, and see if that work has been referenced by other writers.

In the Internet world, the “publisher” is typically the organization that is hosting the web site -- allows it to “live” on the organization’s server. Typically, the organization’s web address will be in the beginning part of the particular web page’s address. Usually, the organization that is hosting the page will have a “home” link, or insignia of the organization that you can click on, to get to the organization’s home page. If there isn’t a link that allows you to click back to the publisher’s home site, you can sometimes “backtrack” the page’s URL (erase the URL back to a “slash” mark), and then press enter. When you are looking at an organization’s web site, look for links to a “mission” statement, that tells you what the organization’s reason for being is – or look for links like “introduction” or “about us.” The organization should provide full contact information on its web site.

The sponsor of a web page can be any number of people or organizations. It may be a company or a foundation that has funded the research. It may also be an organization that links to the page, or organizations that have partnered with the author to provide information or resources. Who is putting their stamp of approval on the web page? Is it someone you recognize and respect? What is the relationship between the writer of the page and the organizations that are publishing and sponsoring it? Is the sponsor an authority in their own right on the issue at hand? Sometimes, the web address / URL can tell you something about who sponsored or published a web site. Organizations with a “.com” site are typically trying to sell or advertise a product or service. “.Net” is a page that’s hosted by Networked Service Provider. An NSP is open to anyone who subscribes to that organization’s service, and often has a mix of homepages, e-mail, and online services. Typically, a .Net organization will have some resources that are not for free to the public. “.Org” is used for nonprofit organizations, including churches, lobbying and political organizations, etc. Sometimes “.orgs” are an excellent source of information, but sometimes they only support one side of an issue. “.Edu” is used for web pages that are sponsored by a school or university. This includes students’ personal pages, as well as research results! Finally, “.state.pa.us” and “.gov” are used by state and federal government agencies.

An important thing to watch out for is “conflict of interest.” This is when the author or organization has a vested – often financial or political interest – in the results of the research. For instance, a few years ago when I worked in the sciences, there was a big controversy about a university that did a study to prove whether or not eating cranberries or drinking cranberry juice stopped urinary tract infections. After the study proved that it did, it came out that Ocean Spray – one of the largest producers of cranberries in the U.S. – funded the research! It’s been found that company-sponsored research results in findings that are favorable to the
corporation’s position most of the time. Clearly, conflict of interest may be an issue here.
A related factor to authorship is an article, book, or web site’s point of reference – where is the author coming from, and who is he or she writing for? Web pages by hobbyists and professionals may be factually correct, but usually your professors are going to expect you to cite web pages that are written by researchers and other knowledgeable, credentialized “officials.”

All articles, books, and web sites – even ones published by well-respected and well-established organizations -- come at an issue from different angles. In order for your knowledge to be whole, you need to be able to recognize these different viewpoints.
Timeliness of a web site is also a very important because there is no one person who is pulling down outdated web sites or updating old articles and books.

When you are looking at a web site, try to figure out when it was published. Beyond the publication date, a key thing to think about is whether this document has “moved” in step with its subject. Here are some clues: Does it use terminology that’s out-of-date? Does it fail to mention important events or facts that have occurred recently (for example, a travel web site that tells you its “a must” to visit the top of New York’s World Trade Center)? Does it cite articles, reports, or books that are really old or have since been published in new editions? If it includes links to other web sites, do they still work?

It can be really hard to determine whether a site is up-to-date enough for your needs – particularly if you don’t know a lot about the topic.
A lot of times, presentations on web evaluation will talk about determining the accuracy of a web site. But this is hard to do, isn’t it, when you are in the state of learning about the topic yourself. Don’t get discouraged or give up! The key is, finding sites whose contents can be, and are, verified by other sources.

When checking this, you need to go beyond finding other people who mention the site. It’s especially a problem when you find people or organizations just repeating the information on the site you have in question. Very often, especially on the Internet, people will regurgitate information they’ve read somewhere else without checking the facts. That’s how misinformation spreads! You might have to spend some time tracking down the original source of the data.

A good web site will make this easier on you by providing complete references to books, articles, documents, and web sites that the author used in researching the topic. A citation should include enough information for you to be able to find the exact same document easily. For instance, a reference to a book should include the correct title, author, publisher, date, and the page numbers. An article should include the name and date of the journal the article came from, well as the title, author, and pages of the article itself. Even references to other web pages should have a working link, along with the hosting web page address, author, etc.

Going a step further, it’s even better if the web site discusses how they went about gathering the data, why they chose their particular approach to the topic at hand, and what assumptions are they making when they approach the data. This is especially important if the authors are presenting research results and statistics. You want to look for “definitions” of the terminology the study is using, a discussion of research methods, how the information is organized (“how to use this site”) and the like – anything that helps you to understand the web site better.
Many professors will ask you to use “scholarly” journals. This slide describes some of their characteristics. The next two slides list some of the typical features of trade and popular publications. Scholarly publications are typically written by experts, for experts. They cover a very narrow aspect of the topic, looking at it in a new way. They sometimes use scientific experiments, questionnaires, or other methods to obtain “primary source” data.
Here are some typical characteristics of a “trade” or professional publication. They are often written for people who work in the same industry or profession. Trade publications often summarize or explain the research studies done by other experts, and they often provide practical advice you can use in the workplace. Some of your professors might limit the number of professional/trade magazines you should use, because they are not vetted as carefully as scholarly articles.
Finally, here are some characteristics of a “popular” magazine or newspaper. Typically, they are not written by experts and they cater to all kinds of readers. Articles from Time Magazine or newspapers like the Philadelphia Inquirer might give you ideas for research topics, and they might be a good introduction for a topic you know very little about. But for college-level assignments, your professor will expect you to use more professional and scholarly resources.
These slides only cover the tip of the iceberg in describe all the challenges of doing research, and all the ways that the library can help. Please let Bernadette Lear know if you need further information!
Any questions?
Thanks for your interest in the library. 😊