1. Research Mechanics and Writing Fundamentals

If your students are newcomers to conducting research and you want to give them background into the fundamental mechanics of research, including a general overview of common research processes and methods, writing basics, and source types, refer to:

- Video: Research Process
- Video: Primary and Secondary Research
- Video: How to Read Scholarly Materials
- Tutorial: How to Read Scholarly Materials
- Video: Anatomy of a Research Paper
- Tutorial: Source Types
- Video: Types of Sources
- Video: Writing Help

DISCUSSION TOPIC

Writing Skills

What are some skills that you can utilize to improve your writing? Can you list the elements and steps of the writing process? Take a minute to outline your own personal writing process. What are your good habits? What about your bad habits? Does any part of this process strike you as being more helpful than others? How can honing good writing habits impact your everyday life? Where can you go to get help with your writing assignments on campus? What should you expect from a help session? What should you come prepared with?

ACTIVITIES

Primary Research

Has anyone done primary research? Have students share experiences about how the experience was valuable and/or what they wish they knew at the beginning of the process. Students may have conducted interviews, created surveys, or worked in a lab. How do these experiences inform their assumptions about research? How do students view other research methods outside their chosen field?

Give students the same simple matrix of data and ask them to make up a story explaining the data. Have students compare their developed narratives and discuss any similarities or discrepancies in their understandings.

Assignment Requirements
Using either a real assignment or an imaginary assignment, have the students discuss the assignment requirements. Have them brainstorm in small groups about potential “unwritten” requirements, such as the time spent on various assignment activities, preparation, background research for unfamiliar concepts, etc.

**Tour of the Library**

An alternative to the traditional library tour is a self-guided group tour. Students are placed in small groups, each of which is assigned a library section/floor/department to explore. Students make observations about organizational patterns, signage, technology, layout, desks, library staff, etc. Upon returning to the classroom, have groups give short “pop” presentations about what they discovered, with the instructor correcting and/or adding to student observations.

**Scavenger Hunt**

Use the library’s website and/or open web search engines for activities such as citation “hopping” or “linking” in order to trace back sources.

Scavenger hunts also can be set up within the library building space using a theme or narrative: students as explorers, themes related to class subject or discipline, school history, local interests, etc. Scavenger hunts can focus on one department or area of the library, such as reference or periodicals.
2. Why Information Literacy Matters

For resources to teach students about the role of information in contemporary life and the significance of information literacy, refer to:

- Tutorial: Why Information Literacy Matters
- Tutorial: Why Thinking Matters (2020 Update)
- Video: Life in the Information Age
- Tutorial: Information Has Value
- Video: Data, Information, and Knowledge

DISCUSSION TOPICS

Sharing Information

How do students share findings? Research papers, social media, conversations, etc.? Do they understand their place in the larger world of information and progress? Brainstorm avenues of sharing or packaging information for others. What about ethics when it comes to information sharing, including both scholarly information and personal information in a digital environment? How does society factor into sharing information? Societal factors may be a worthwhile perspective when considering various countries’ censorship issues.

What is Information Literacy?

Have students brainstorm the meaning of information literacy. This can take place as a classroom discussion or as small group discussions. Expanded discussion might include the definition/nature of information, how information is conveyed and used, and the definition of “literacy” in this instance. How do other forms of literacy contribute or relate to information literacy (such as visual literacy and digital literacy)?

Breaking Down Information Literacy Elements

Utilizing IL standards and/or threshold concepts, break down IL as steps or theories based on the nature of class or student level. An example might be dividing IL into the following “steps”:

- Recognizing an information need
- Knowing where to look for information (how to look, resources available—library, Internet, people, etc.—what can they use?, why should they use these resources?, etc.)
- Evaluating information (including gray areas of information)
- Using information, ethics, and so on.
The dissecting of IL skills may depend on class time, student level, subject focus, or other factors.

**The Nature of Information/What is Information?**

Have students brainstorm ideas about the nature of information. Some discussion starters might include: information vs. knowledge, information vs. data, does information have to be factual to be considered information?, and how is information conveyed/transmitted? These questions lend themselves to discussions of printed information, images/art, body language, spoken language, etc. This may be a rich area to explore and can be used across a variety of disciplines.

**Focus on Learning New Skills**

Information literacy requires us to learn new skills and technologies in order to access and share information. What technologies have students encountered or would like to learn more about when it comes to access, evaluation, and sharing information?

**Lifelong Learning**

Discuss the following: "A broad term that encompasses the full spectrum of an individual's educational experiences from traditional school to other forms of learning, which may include non-formal, informal, and self-directed learning. The term is often used in connection with adult education in the higher-education setting. It also is used in the occupational and professional development setting. Lifelong learning refers to a lifelong commitment to continual learning and personal development and improvement."

**Why/How are Information Literacy Skills Important in the Workplace?**

Have students discuss ways in which IL skills could apply to their ideal jobs after graduation. Technology skills also factor into this discussion.

Discussion options: Develop a humorous list of made-up symptoms and have the students discuss IL skills as a process of discovery. If they have a set of symptoms, what is their information need? Where can they go for information? Where should they go for information? Are some sources of information better than others? Why? Are some sources gray—not necessarily wrong or right? How do they evaluate the information they find? How would they evaluate their doctor’s diagnosis? Are there ethical implications of the information they've discovered? Should they use the newfound information to diagnose others with similar symptoms?

**ACTIVITY**
Information Log

Ask the student to record any piece of information he/she looked up (or wanted to look up) over the course of the day. Examples: What is being served at the cafeteria or café, how much something costs, when the next bus is scheduled to depart, or the due date of an assignment.

Alternatively, ask students to keep a log of questions asked by others. How do they respond to others’ questions? How do they help others find information? These activities also can lead to research topics and discussions on the social nature of information. You can make concept maps in large or small groups.
3. Developing Ideas and Research Questions

If your students are at the beginning of a research assignment and you want to give them guidance on developing a topic, refer to:

- Tutorial: Developing a Research Focus
- Video: How to Narrow Your Topic
- Tutorial: Background Research Tips
- Videos: Research Process

DISCUSSION TOPICS

Purpose

What is the purpose of research? What are the traits of successful researchers? Does research differ for short term vs. long term projects?

Topic Choice

What role does topic choice have on the success of your research? (And how do you define a successful research project in your area of study?)

ACTIVITIES

Research Project Plan

Students begin by creating an overall plan and timeline for a research project, doing so in a similar way as they would for a paper. Students can work in teams or small groups to choose and develop their topics, thesis statements, and research focus. They should look at topic areas, subjects, aspects, etc. Have team members review topics and brainstorm ideas, ways to narrow or expand topics, and potential problems with the topics. It can help to employ a sort of peer review effort, allowing students to “see” the topic selection process from a different angle.

Brainstorming #1

In groups, students can brainstorm topic keywords, synonyms, and related terms. This works well with just paper and a pen, but also with whiteboards or virtual spaces. Students may create mind maps of terms, with multiple students adding interpretations and observations.
Brainstorming #2

Organize students into groups of 4 or 5. Distribute blank paper or use a mind map or brainstorming template. Assign each group a topic, or allow them to choose their own. Instruct students to write the topic in the center of the mind map. Explain that they are to write down as many related topics or subtopics as possible. Set a timer for 5 to 10 minutes and allow the students to work. When time is up, ask them to discuss their ideas with the class. Alternatively, assign multiple groups the same topic, and during the discussion compare the ideas that the groups discovered. Explain to students that what they put into the mind map can be used to help them expand or narrow their research on a topic, or organize sections of their paper. Remind students that their list of search terms may change as their research process evolves.
To provide your students with a broad overview of the principles of evaluating sources, refer to the following materials:

- Video: What is Authority?
- Video: Evaluating Sources
- Tutorial: Evaluating Information

DISCUSSION TOPICS

Evaluating Information

Begin a real-world conversation about evaluation. Examples may include medical topics, large purchases, news sources, social media, mockumentaries, gossip, etc. Ask students how they would go about evaluating information they find on Twitter, Facebook, or other social media platforms. Have students ever encountered a documentary or mockumentary? How did they tell the difference? Do students question news sources? Do they look at multiple sources of information when encountering a news story that catches their interests? Investigate those sources for motives or bias before accepting their version?

The Importance of Using Scholarly Sources

Why do scholarly sources matter? When and why are they more useful than non-scholarly information?

Evaluation Criteria

Discuss what authority means. Why do credentials or academic/research associations matter? What about the author’s background and/or publication history? Does the publisher matter? Why or why not? This might be a good place to take a look at predatory publishers.

Accuracy

Can the information be verified via cited sources? Does it agree with other sources? If not, do students conduct more research? Has information about methodology been included? How much time do students put into determining accuracy? Are there time constraints? Are there shortcuts?
Currency

Is currency important for your subject or topic? Can you determine when the information was produced or published? If the information is outdated, but otherwise applicable to your project, look for more recent work from the same author. Does the information need to be examined from a historical or cultural perspective?

Relevance

Is the scope appropriate for your topic? What is the focus? What information is included and/or excluded? If it describes research, is there information about the sample used in the research? Is the sample representative of the population?

Objectivity

What is the purpose of the work? Does the work offer facts, opinions, or a combination? What is the tone of the work? What assumptions does it make?

Audience

Is this a scholarly publication? Trade information? General? If it is a web page, is it part of a larger site? Is there an expectation of prior knowledge or assumptions?

Evaluating Non-Scholarly Sources

The same principles apply as to scholarly sources, but with less emphasis on scholarly information requirement. For non-scholarly resources, including alternative types of digital media like podcasts or video logs, make sure to understand the motivation of the information provider. Ask questions and verify information across multiple resources.

ACTIVITIES

Evaluating a Source

Ask students to find 2 unacceptable sources and 1 that is acceptable on a topic relevant to an academic assignment. They should write a paragraph or essay describing the evaluation process, their observations, and decision for each of the 3 sources. If time permits, have students share reasons for finding a site unacceptable for an academic assignment.

Visual Evaluation

Pick an article with an image from a local print newspaper or from an online piece of journalism. Give the students 2 to 5 minutes to read the article and ask them to write a 1-minute essay.
about how the image contributes to the story. Have students share their findings with the class or in small groups.
5. Evaluating Sources (Focus on Web/News Sources)

If you are teaching students about evaluating sources and would like to focus on web/news sources, refer to:

- Tutorial: Choosing the Best Web Source

DISCUSSION TOPICS

Objectivity in Reporting

Objective vs. persuasive journalism: Opinion and persuasive examples include accounts, columns, commentary, op-eds, and reviews. Look at word choices, tone, and design.

Website Evaluation

Discuss the differences among .edu, .com, .gov, .org, etc. Many students take these URL designations for granted and don't understand the importance or usefulness of them.

ACTIVITIES

Describing a Source

Either provide a health article citing a study(ies) from a popular news site, such as the BBC or The New York Times, or ask students to find one. Direct students to locate the original source of any statistics and identify:

- Who created this information (study authors)
- Where the study originally was published
- The purpose of the study
- The source of the data
- A description of the population
- A description of the sample
- A short definition of the problem
- A short definition of the variables for the statistic reported in the newspaper
- Benchmark variables
- Questions about how the data may be flawed
If time allows, ask the students to find benchmark variables and write an evaluation of the statistic.

**Evaluating News Sources**

Have your students examine the infographic below and discuss what they see. Discussion questions might include: What do you notice about the funding sources for the new organization described in this infographic? How might revenue sources influence the content of a particular news organization? What, if anything, do you think news organizations can do to minimize bias or influence from funding sources?

Another activity to accompany the infographic would involve asking your students to locate 2 to 3 news reports from the different news organizations on the same topic and compare them, taking into account what they have learned about their funding. Ask them: What, if any, alignment does the angle of the news piece have with a particular point of view? Is the perspective what you expected, given the funding sources? Do you think this source succeeds in being objective? Why or why not?

Click the infographic to open in a new tab, or right-click to save.

(//cdn.credoreference.com/client-7446/edx/faculty-modules/following-the-trail-npr.png)
6. Synthesizing Information and Developing Arguments

If you are teaching students how to synthesize information and develop an argument, refer to:

- Videos: Research Process
- Video: Thesis Statements
- Tutorial: Synthesis
- Video: Synthesis
- Video: Synthesizing Information for Academic Writing
- Tutorial: Synthesizing Information for Academic Writing

DISCUSSION TOPIC

Synthesizing Information

Can you think of a time where you had to synthesize information? Was it for a class or in your personal life? If it was for a class, did you have to follow any particular format (outlines, annotated bibliographies, etc.)? Now that students are aware of what synthesizing information is, have them spend a few days observing times that they need to synthesize information. Direct them to keep a log and be prepared to share with the class.

ACTIVITIES

Thesis Statements and Keywords

Create a set of imaginary thesis statements. Have students pick out keywords, develop a list of synonyms and related terms, and select a few databases appropriate for the topic. Have them provide reasoning behind their selections.

Tell students to search various keywords and synonyms in a library database and in Google. What did they discover about the importance of synonyms and multiple keywords in the databases? How about spelling in databases vs. Google? Also, have students look for alternative/suggested terms that would help narrow their topic. What effect does this have?

Have students work in pairs to swap thesis statements. Students should create a list of keywords and synonyms for their partners, select a few appropriate databases or other
resources, and locate at least one source for their partner’s project. Instruct students to utilize the Send/Share function in a search tool to send their partner a link or copy of the source.

**Drafting**

Using an outline not only helps your students apply structure to their paper, but can assist them in getting started. Instruct students to fill in the blanks of an outline template. Stress that they do not have to start with the introduction, which is where many students get stuck. Sometimes filling in the body of the paper helps a student solidify their introductory argument and conclusion.

**Revising**

Many students struggle with conveying ideas clearly through writing—yet are adept at these skills while speaking. Instruct your students to choose a partner and explain that one partner will give a brief description of their paper out loud while the listening partner takes notes. Invite students to switch roles and read their own paper (or sections of) aloud to their partner. Alternatively, have students swap papers. Instruct them to ask these questions: Does my description match the content of my paper? Do the sections of my paper flow together, or are there abrupt shifts in ideas? Are there gaps in my paper that need to be filled?

**Synthesizing**

Select one or more of the following activities to give your students practice synthesizing information.

- Ask students to pull out the central theme(s) of a sample passage you provide. Using the same paragraph, ask students to summarize the paragraph using their own words.
- Provide students with a few short passages and have them synthesize the information into one paragraph.
- Ask students to compile ways in which a few research articles (with different premises and/or data) could be used together in a final paper.

**Free Writing**

Organize your students into groups of 4 to 5. Assign each group a topic, or allow them to choose one. Explain that you are going to allot a certain amount of time for them to write as much as they can about that topic—never letting their pen leave the paper. Stress that the quality of what they write is not important. The goal is quantity, to write down as many ideas that relate to their topic as possible. This will help students get accustomed to putting their thoughts onto paper. Set a timer for 5 to 10 minutes. When your students are finished, they can compare notes with their group members. Ask some follow-up questions: Did all members think of the
same ideas? What was different about the responses, and why did group-mates arrive at different conclusions or questions?
7. Logical Reasoning and Analysis

If you are teaching students how to practice logical reasoning and analyze information, refer to:

- Tutorial: Introduction to Logical Reasoning *(2020 Update)*
- Tutorial: Analyzing Information *(2020 Update)*

**DISCUSSION TOPIC**

**Logical Reasoning in Everyday Life**

How do you use logical reasoning in your everyday life? What types of evidence do you use in your daily life to solve problems or make decisions?

What are the consequences of failing to apply logic to the process of solving a problem or making an important decision? Describe an example in which you or another individual made a decision or argument that was not based on sound logic or evidence.

**ACTIVITIES**

**Reasoning Log**

Students will keep a log of their reasoning processes for the week. They will then select two events to describe in detail. For each logical reasoning event, students should be able to identify the reasoning process used (inductive or deductive) as well as their sources of evidence used to understand the issue at hand, make a decision, or solve the problem.

**Analytical Question Writing**

Students will practice approaching a research topic with an analytical mindset. Start by providing students with a research topic such as the Great Depression. Next, ask students to brainstorm simple background research questions related to the topic. For example, “what happened to the American economy during the Great Depression?”. Students will then critically
consider the same aspect of the research topic by brainstorming an analytical question such as “how did the economic downturn of the Great Depression influence banking reforms?”

**Source Analysis**

Provide students with an article on a topic that is relevant to students’ interest or current events. Ask students to analyze the author’s use of evidence and to evaluate the article for bias or unsound reasoning. Students can complete this activity in small groups or individually.

**Evidence Validation**

Provide students with an article on a controversial topic (see ProCon.org for topic suggestions). In small groups, students will validate the evidence cited within the article for authority and accuracy. Students should be able to locate at least two additional credible sources reporting on the issue. Each group should be able to explain if and how the original article’s argument can be validated by other credible sources.
8. Scholarly Communication and Academic Sources

If your students are completing an assignment using academic sources and you want them to have an understanding of scholarly communication, refer to:

Tutorial: Scholarship as Conversation
Video: Peer Review
Tutorial: Why Citations Matter
Video: What is Authority?
Video: How to Read Scholarly Materials
Tutorial: How to Read Scholarly Materials
Tutorial: Annotated Bibliography

DISCUSSION TOPIC
Sharing Information

How do students share findings? Research papers, social media, conversations, etc.? Do they understand their place in the larger world of information and progress? Brainstorm avenues of sharing or packaging information for others. What about ethics when it comes to information sharing? How does society factor into sharing information? Societal factors may be a worthwhile perspective when considering various countries' censorship issues.

ACTIVITIES
How to Read Scholarly Materials

Provide students with a scholarly article printed on paper. Have them break it down into different components by literally cutting the paper into separate pieces, broken down by section. Then ask them to rearrange the pieces in the order that they need to read them based on information from the lesson.
Alternatively, have students work as partners and compare their abstract summaries. Are their summaries similar? How do they differ? This will show students that abstracts are very much open to interpretation.

**Reading Abstracts**

Provide students with an article and direct them to read the abstract—nothing else. In their own words, students will predict what the article will be about using only the information that they read in the abstract. Then have them read the rest of the article to find out if their predictions were correct. This activity points out that reading the abstract will not tell students everything that they need to know.
9. Choosing Sources

If your students are completing an assignment that requires a variety of different source types, and/or they need guidance on choosing appropriate sources, refer to:

- Video: Primary and Secondary Research
- Video: Types of Sources
- Tutorial: Source Types
- Video: Evaluating Sources
- Tutorial: Evaluating Information

DISCUSSION TOPICS

Source of Information

Ask the students how they handle gossip. Do they question, out loud or silently, the source of the information, the biases, etc.? This is a good place to have students explore their own personal biases and how they factor into evaluation of information while offering a real-world application of IL skills and social ethics.

Why/How are Information Literacy Skills Important in the Workplace?

Have students discuss ways in which IL skills could apply to their ideal jobs after graduation. Technology skills also factor into this discussion.

Discussion options: Develop a humorous list of made up symptoms and have the students discuss IL skills as a process of discovery. If they have a set of symptoms, what is their information need? Where can they go for information? Where should they go for information? Are some sources of information better than others? Why? Are some sources gray—not necessarily wrong or right? How do they evaluate the information they find? How would they evaluate their doctor’s diagnosis? Are there ethical implications of the information they’ve discovered? Should they use the newfound information to diagnose others with similar symptoms?

ACTIVITIES

Types of Sources
Have students compare either two primary sources about the same event (Civil War diaries or letters, for example), or a primary and a secondary source about the same event. How did the student determine if each piece was a primary or a secondary source? How do the pieces differ? What additional research questions does the student have after reading the pieces?

**Government Information Scavenger Hunt**

Students find government websites for a health statistic, a labor statistic, the text of a new law, a map used for environmental studies, tax help, a government-funded scientific study, a description of a veteran benefit, name of a high-ranking official in the military, a database, or resources for teachers, and explain the most surprising thing they found while browsing a government website.

Explore two government websites from different levels of the same geographic area (e.g., a town and a county, a county and a province, a town and a state). Find two pieces of information that only are available at the lower level, two pieces that only are available at the higher level, and two pieces that are available at both levels.

Have students look up statistics/census data about their hometown. What information is available via government sources? Have them compare their hometown information to their current residence or school location.

Make students aware of really cool government sources by having them access and explore the USGS website (explore local earthquake information, for example) or NASA (Hubble). Have each student explore an interesting government source online and share their findings.

**Primary and Secondary Sources**

This may be a 1-minute writing assignment on common activity among the students (e.g., what students had for breakfast, or a campus or local event about which all the students are aware) describing their experiences. Share the pieces with partners/small groups/class and discuss how answers could be considered primary sources and converted into secondary sources.
10. Introduction to Searching

If your students are just becoming familiar with searching for sources, particularly when using an academic database or catalog, use the following items that focus on database choice and keyword searches:

- Videos: Searching as Exploration
- Videos: Beginning Research with Wikipedia/Google
- Video: Choosing a Database
- Tutorial: Choosing and Using Keywords
- Tutorial: Search Techniques Part 1

DISCUSSION TOPICS

Search Strategies

Have students discuss or brainstorm search strategies they use now. Focus on non-academic searching, like Google searches or how they search for fun. Have they seen patterns, discovered shortcuts, etc.?

Have students discuss how they find peer-reviewed or scholarly items outside of the library. What are hindrances to this process (for example, paywalls)? Why might the library resources be better to use in these cases?

Date Published

When searching for sources, why is the date feature important? What does it do? Are there subjects or instances when students need to limit their research to recent material? Older material? Specific decade?

ACTIVITIES

Databases

Have students identify two or more databases or related tools. Students should write out their thesis, keywords, and synonyms. Direct students to search in a library database, catalog, or
discovery tool and share observations. Compare this to search engines like Google. Have students explore similarities and differences in these tools.

Ask students to search for the same topic/subject in two databases. How did searching in each database work? Differences? Similarities? Search results? Numbers? Relevance? Was one a subject-specific database? Does that make a difference in search results? Have students present or write up a short report on their findings.

**Thesis Statements and Keywords**

Create a set of imaginary thesis statements. Have students pick out keywords, develop a list of synonyms and related terms, and select a few databases appropriate for the topic. They should provide reasoning behind their selections.

Tell students to search various keywords and synonyms in a library database and in Google. What did they discover about the importance of synonyms and multiple keywords in the databases? How about spelling in databases vs. Google?

Have students work in pairs that swap thesis statements. Students should create a list of keywords and synonyms for their partners, select a few appropriate databases or other resources, and locate at least one source for their partner’s project. Have the student utilize the Send/Share function in a search tool to send their partner a link or copy of the source.
11. Advanced Searching/Refining Results

For students with basic familiarity with searching, use the following resources to instruct them on more advanced search techniques and refining search results:

- Tutorial: Search Techniques Part 2
- Video: Refining Search Results

DISCUSSION TOPIC

Iterative Nature of the Research Process

As a researcher uncovers information, he/she may need to revise the topic or repeat searches with updated search terms. As the researcher outlines the argument, he/she may identify additional aspects for investigation and research.

ACTIVITIES

Search Scavenger Hunt

Have students retrieve sites with specific domain types relevant to the project they are working on and/or their area of study. For example, have them locate a specific government website (.gov) or an academic source by using Google Advanced Search.

Google Advanced Search

Have students conduct an advanced search in Google. Take note of their results. Compare them to the kinds of results they receive in the following activity (using controlled vocabulary to search scholarly databases). How do the search experiences and results compare?

Controlled Vocabulary

Instruct students to identify two or more databases or related tools. Students should write out their thesis, keywords, and synonyms. Within the database, have students utilize features related to controlled vocabulary to locate useful terminology. Students should make a list or chart of their keywords and the corresponding controlled vocabulary terms.
Real-Life Boolean Operators

Pick a topic and have students organize themselves into groups using Boolean operators (for example, students who are freshmen AND biology majors, students who live in the dorms OR are seniors, students who like English but are NOT English majors). Once the students are broken into groups, have them pick a topic to search and work together to choose a database, search for articles on their topic, refine their results using specific parameters (for example, only articles from the last 5 years, only peer-reviewed articles, etc.). Students then should use the thesaurus to look for different ways of wording their original keyword search, and with the same limiters as before, compare the results from the two different searches.

Within a database, have students work in pairs to explore Boolean operators, search strings, limiters, etc. Have them make use of any help features available. What helps, what seems too complicated to be useful, when might they use certain features, etc.?
12. Academic Integrity, Plagiarism, and Intellectual Property

If you want your students to be aware of academic integrity, plagiarism, and respecting intellectual property as they complete an assignment where they will need to take these concerns into consideration, use the following resources:

- Video: Academic Integrity
- Video: Plagiarism
- Video: Copyright
- Video: What is Authority?
- Tutorial: Why Citations Matter

DISCUSSION TOPICS

Citations

Before discussing the nature of citations and references, ask the students to come up with definitions of these terms. What are their current views? Experiences? Assumptions?

Citations as puzzle pieces or clues in a mystery: If we view citations as part of the academic conversation, what part do they play?

How do citations and references help solve problems? How do they help when we’re curious about a topic? How do citations help us prevent plagiarism? Is it as simple as using in-text citations and reference lists, or is it more complex?

Why should we acknowledge others’ work? Why is it important to forwarding research and various academic fields?

Citing statistics: Why must statistics always have citations? Discuss the nature and creation of statistics. Citing statistics adds credibility and helps you avoid accusations of making statistics up.

Citing images: Why should images always have citations? Discuss the nature and creation of images. How can they be manipulated or used out of context? How do citations help clarify the original intent or message of an image?
Citation generators and organization tools: Some professors don’t allow use of these tools; why do you think that is? Why might some professors consider these tools cheating? How does this relate to technological literacy? What tools do students already use? What would they like to learn about or see in the future? Brainstorm the “perfect” citation tool. Discuss human and machine error when it comes to citations: the importance of double-checking!

**Plagiarism**

Begin your discussion by asking lead-in questions to gauge students’ knowledge of plagiarism and its consequences. What do you think plagiarism is?

Can turning in previous work from another class be considered plagiarism? When is it OK to use other people’s work without citing it? Is there a specific amount of work that can be used without recognition?

Take a minute to think about some examples or instances that could be considered plagiarism (e.g. copying work or paraphrasing ideas without giving credit, including switching around the order of words and arguments to make the writing “differ” from the original work; taking individual credit for work done by a group; and using material quoted in one of the sources you found and citing it as if you read the entire work).

**Academic Integrity**

What is the university’s policy on academic integrity? Take a moment to think about 5 fundamental values: honesty, trust, fairness, respect, and responsibility. How do they fit into your academic career? What is academic dishonesty and what are potential consequences if one is caught violating a policy?

**Academic Dishonesty**

What are some strategies that you find helpful to avoid committing plagiarism, even unintentionally? If you ever are in doubt about whether you should cite a source or not, what is the best course of action to take? Do you know of any helpful resources to consult if this happens?

**ACTIVITY**

**Academic Dishonesty Detectives**

Provide students with an excerpt of a mock assignment and have them analyze it for examples of academic dishonesty. They might try Googling phrases or using an anti-plagiarism software to identify plagiarized content, sources not cited properly, or data that may have been fabricated. What clues would they look for?
13. Principles of Citation: MLA

If you would like to familiarize your students with the principles of citation and MLA Citation Style, refer to:

- Tutorial: Why Citations Matter
- Video: MLA 8th Edition Citation Style
- Tutorial: MLA 8th Edition Citation Style
- Video: MLA 7th Edition Citation Style

DISCUSSION TOPIC

Citations

Before discussing the nature of citations and references, ask the students to come up with definitions of these terms. What are their current views? Experiences? Assumptions? Citations as puzzle pieces or clues in a mystery: If we view citations as part of the academic conversation, what part do they play?

How do citations and references help solve problems? How do they help when we're curious about a topic? How do citations help us prevent plagiarism? Is it as simple as using in-text citations and reference lists, or is it more complex?

Why should we acknowledge others’ work? Why is it important to forwarding research and various academic fields?

Citing statistics: Why must statistics always have citations? Discuss the nature and creation of statistics. Citing statistics adds credibility and helps you avoid accusations of making statistics up.

Citing images: Why should images always have citations? Discuss the nature and creation of images. How can they be manipulated or used out of context? How do citations help clarify the original intent or message of an image?

Citation generators and organization tools: Some professors don’t allow use of these tools; why do you think that is? Why might some professors consider these tools cheating? How does this
relate to technological literacy? What tools do students already use? What would they like to learn about or see in the future? Brainstorm the “perfect” citation tool. Discuss human and machine error when it comes to citations: the importance of double-checking!

**ACTIVITY**

**Breaking Citations Down**

Develop a list of citations broken down by component (author, date, publisher, title, etc.). Type or write them on larger pieces of construction paper, cardboard, etc. utilizing a variety of colors, shapes, and sizes. Have students work in groups to assemble the parts on pinboards, a wall with tape, magnetic boards, etc. This easily can be turned into a competition. It also leads to discussions about how and why students chose to assemble citations in a certain way and discussions about their reasoning for their mistakes.
If you would like to familiarize your students with the principles of citation and APA Citation style, refer to:

- Tutorial: Why Citations Matter
- Video: APA 7th Edition (2020 Update)
- Video: APA Citation Style 6th Edition

DISCUSSION TOPIC

Citations

Before discussing the nature of citations and references, ask the students to come up with definitions of these terms. What are their current views? Experiences? Assumptions?

Citations as puzzle pieces or clues in a mystery: If we view citations as part of the academic conversation, what part do they play?

How do citations and references help solve problems? How do they help when we’re curious about a topic? How do citations help us prevent plagiarism? Is it as simple as using in-text citations and reference lists, or is it more complex?

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15. Principles of Citations: Other (Turabian, Harvard, Chicago)

If you would like to familiarize your students with the principles of citation and are using Harvard, Turabian, or Chicago style, select from the following resources:

- Tutorial: Why Citations Matter
- Video: Turabian Citation Style
- Video: Harvard Citation Style
- Video: Chicago Style 17th ed. Books and ebooks
- Video: Chicago Style 17th ed. Journals
- Video: Chicago Style 17th ed. Websites and Social Media
- Quiz: Chicago Style (2020 Update)

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