

# Find the Right Images



**FINDING JUST THE** right image can seem daunting. You may be able to visualize exactly what you're looking for, but how do you translate that mental picture into an actual image that you can use? Maybe you've come across an image that communicates what you're trying to say, but you're not sure whether it's available for the kind of use you have in mind. It can be difficult to know where to look for images and how to navigate the millions of choices available. The resources, strategies, and activities in this chapter will build your repertoire of approaches to finding images and guiding students as they look for images.

Finding images is not as simple as knowing where to look. Like all research, it is an iterative process that involves multi-modal exploration, browsing, learning more, and then exploring further. There may be times when you are looking for a specific image, with an established title and creator. But more often, visual content is not easily defined by words. This chapter reveals sources and search strategies for finding the images you need.



## ACTIVITIES IN THIS CHAPTER

- 2.1: Preparing for Image Searching
- 2.2: Exploring Digital Image Sources
- 2.3: Finding Creative Commons Images
- 2.4: Understanding Image Descriptions for Smarter Searching
- 2.5: Reverse Image Searching

## Foundational Questions

### **What Kind of Image Do I Need?**

Before starting your image search, take a moment to reflect. Think about how your image needs to look, what it will communicate, and how you plan to use it. What purpose does the image

serve in your overall project? What are some words that might describe the image? Next, think about your planned image use—are there any constraints associated with it?

### ***Where Do I Look First?***

Use our guides to types of image sources to better understand your options. Do you need an image for your blog or research guide? You'll need an image available for use on the open web, so consider Creative Commons or open media. For academic projects, image research typically is most effective when conducted in conjunction with textual research. Maybe the image you need is in one of the articles on your topic or on a website you're already consulting.

### ***What Search Strategies Will I Use?***

Update your image search strategies. Finding images differs in a few important ways from finding textual materials, so you'll want to experiment with different approaches to discover which ones work best for you. As you work with different types of images and sources, keep track of your favorite strategies, keywords, and sources.

### ***Do I Need to Try More Sources or Strategies?***

If you reach a dead end in your image search, try new types of sources, use different keywords, or try browsing instead of searching. Are there blogs or websites that use images you like? Follow the image links for source ideas. Notice the tags and keywords used to describe the kinds of images you're looking for, and incorporate them into your searches. Find out more about your topic generally, and this research will open up new ideas for finding images. Explore color-search, reverse image search, and other tools to expand your options.

### ***How Do I Keep Track of What Works?***

When you want to use the images you've found, whether for study or new creative projects, you'll need to know where the images came from, information about them, and how to cite them. Set up a system for tracking images and their information that is easy to use, and use it consistently. You'll be glad you did as you progress with your image searches and projects.

## **Before You Search**

Before you start looking for an image, take some time to think about the kind of image content you need and how you plan to use it. This preliminary work helps you determine where to look for images and sets you up for an efficient

search. You will save yourself research time and frustration by avoiding common image-research pitfalls, such as finding the perfect image only to determine it is restricted and not available for the reuse you have planned.

A good first step is to visualize the image you'd like to find and jot down words that describe it. You are accustomed to generating keywords for text-based research, and this practice is an extension of that process. It requires an additional step: translating what you are visualizing into words you can use to search. Think about things, places, and people that might be featured in the image you need. What kind of action or event is pictured? Are there certain colors you're looking for? Would you like the image to evoke a particular feeling or reaction? If you're looking for a specific image, write down everything you know about it, including artist or photographer, date, location, title words. This process of articulating with words what you're looking for in visual content moves your image research forward. Add synonyms, variations, and other words that might come to mind, and update your keyword list as you discover how images are described in different sources.

Next, let your planned use for the image guide where you start your search. If you're looking for an image to post on a website or to reuse in a creative project, avoid restricted databases or sources that make images available for viewing only. Sources we list in this chapter as "open" are ideal for this type of project. Library subscription image databases, on the other hand, are useful for high-quality teaching and educational-use images for study and academic projects. As with any research, be prepared to consult multiple sources.

Make note of any technical requirements you may have for the image. Does it need to be screen-sized or larger for a presentation? Or do you just need a small image to refer to in a paper? **Activity 2.1: Preparing for Image Searching** will help you and your students lay the groundwork for an efficient and effective image search.

## Image Sources

At some point, you've likely experienced a moment of hesitation when asked to help a student find an image for a project: Where should you start? Or maybe you're working on a presentation of your own and want to include images but suspect you're overlooking something. You've also likely faced moments of frustration after finding an image you'd like to use, only to discover that it is restricted or not available for reuse.

Take some time to familiarize yourself with the image sources we've included here, and you'll soon develop a list of your personal favorites. You'll find sources ideal for your students and their research and for your own

professional use. Use **Activity 2.2: Exploring Digital Image Sources** to delve into a variety of image sources and discover new options for finding images.

In the section that follows, we've noted which sources include open, restricted, or a mixture of image content. If you're looking for images you need to reuse in an open environment, you can save yourself time by skipping restricted image sources and going right to the ones with content available for reuse. Many sources contain both open image content and restricted image content, so be sure to double-check any licenses or restrictions on individual images within these sources. **Activity 2.3: Finding Creative Commons Images** explores locating and examining Creative Commons images.

### TYPES OF IMAGE SOURCES

Knowing a little bit about different types of image sources means you'll know where to look for the images you need when you need them. Explore must-know information about the following image source types and our **Top Picks** in each category. Refer to the icons in the **Image Rights and Availability** key to determine the typical image usage rights and availability for each image source.







- Image search engines
- Image sharing sites
- Social media sites
- Government image sources
- Stock image websites
- Museum, archive, and library digital collections
- Library databases and discovery systems

Discover additional image sources and stay up-to-date with **More to Explore: Guides to Image Resources** later in this chapter.

#### **Image Search Engines**

Image-specific search engines, such as Google Images, are not image sources per se. Rather, they help you to find images on websites, blogs, and other Internet sites. Image search engines retrieve images by matching your search terms to website text. This text, which is on the same page as the image or in the website metadata, may not specifically describe the image. Some image search engines have reverse image search features that use image-based algorithms to find matching or similar images. Drop an image into the search box instead of entering keywords, and the search engine will find that image wherever it appears on the Internet. Image search engines are great for obtaining a quick visual identification, generating new ideas for research,

#### Key: Image Rights and Availability

-  = open image content
-  = restricted image content
-  = Creative Commons-licensed images
-  = share, link, or embed images
-  = login required
-  = includes pay-per-image options

## Top Picks: Image Search Engines

### Google Images



The go-to image search engine. Advanced search features useful for filtering results by size, type, color, date, rights, and more. Drop image into search box for reverse image search.

### Bing Images



The image search defaults to show “popular searches,” so can help uncover trending topics. The Image Match feature can uncover web pages that include a specific image.

### TinEye Reverse Image Search



Reverse image search tool. Use in addition to Google Images to locate other instances of an image online.

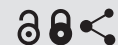
finding multiple sources for images, figuring out where an image came from, and finding Creative Commons images from a wide variety of sources.

## Image Sharing Sites

Members generate the content in image sharing sites. The quality of the content and the information that accompanies the images is entirely dependent upon contributors and ranges from minimal to extensive. The rights that contributors assert over the content they contribute also varies. Many sites

## Top Picks: Image Sharing Sites

### Flickr



The dominant image sharing site, containing millions of images. Especially strong content in areas of photography, travel, architecture, and the built environment. Use the Advanced Search to limit results to Creative Commons content.

### Flickr's The Commons



A subset of Flickr images. Content contributed by cultural institutions around the world, including libraries and museums. Includes primarily historical, public domain, and “no known copyright” material.

### Multicolr Search Lab powered by TinEye



Flickr search overlay that discovers Flickr Creative Commons content based on color. Select colors on palette, adjust color ratio, and add tags to limit search.

### Wikimedia Commons



Images contributed by the public. Contains public domain, open, and Creative Commons images.

**COFFEE BREAK!****Reverse Image Searching**

1. Choose an image and perform a reverse image search with TinEye.
2. Using the same image, try a reverse image search using Google Images.
3. Compare the results.

**REFLECT**

How might you use these tools in your work?

let you limit your search to images with a Creative Commons license. Navigate by license to ensure you're only searching images available for the use you have in mind. Specialized tools have emerged to aid in image discovery on sharing sites, based on license, color, or other factors. Some image sharing sites include content contributed by libraries, museums, and archives, so there is some overlap with these institutional sources. Image sharing sites are best used for photography, visual communication, and illustration.

**Social Media Sites**

Your students may share images and video on one or more social media platforms such as Facebook or Instagram, making these platforms a familiar reference point for explaining how other image sites work. Explore social media sites to generate ideas for research, especially for current and pop-culture topics. Social media sites usually require a login for full access to content, and linking and reposting, rather than downloading and repurposing, are the norm.

**Top Picks: Social Media Sites****Instagram**

Social networking site built for sharing photos and short videos. Requires login to view photos.

**Pinterest**

Visual sharing site where users pin bookmarks of images and web content to boards. Requires login to view pins.



## Top Picks: Government Image Sources

|   |   |
|---|---|
| <b>USA.gov</b>  |  |
| Search U.S. government content, then limit to images.   |   |
| <b>NASA Images</b>  |  |
| Images from NASA, including still and video.  |   |
| <b>National Park Service Digital Image Archives</b>   |  |
| Contemporary photography and historical collections. Images of national parks, monuments, battlefields, historic sites, and more. |   |
| <b>U.S. Department of Agriculture Image Gallery</b>   |  |
| Food, plants, animals, insects, and other agriculture-related images.   |   |
| <b>U.S. Fish and Wildlife Service: National Digital Library</b>   |  |
| Photos, artifacts, and media from the Fish and Wildlife Service.  |   |

### **Government Image Sources**

U.S. government agencies make the images they produce available to the public through the agencies' websites. These images are typically created for documentary, educational, informational, scientific, or communication purposes. Most of these images contain public government information and are free for you to use for any purpose. There are exceptions, however, so look for rights statements and disclaimers about copyright status. Distinguish images *produced* by the government from images *held* by government institutions. For example, the U.S. government did not produce most images in the Smithsonian Institution databases, which are images of items in the institution's collections and may be restricted. Images produced by state and local governments, as well as by many foreign governments, may also be protected by copyright. Find government images online by limiting your search to the domain .gov.

### **Stock Image Websites**

Stock image websites include photographs taken by professional or contributing photographers, artists, or designers. Most stock image sites have a fee structure for different types of uses and offer some content without charge for general purposes. Getty Images, for example, allows anyone to use some of its images online by embedding the images with a link back to the site. Try a reverse image search on the stock image you've selected to see how others have

## Top Picks: Stock Image Websites

### Getty Images



Many images include code for embedding directly into blogs and websites, with accompanying credit line. Fees for most other uses.

### Morqufile



Free, high-resolution, digital stock photography contributed by participating photographers and creatives. Great for presentations.

### The Noun Project



Icons, symbols, and graphics for visual communication. Join and sign in to download icons for free.

used it, especially if you're aiming for a unique look. Stock image websites are useful for linked images on websites or blogs, for illustrations, and for visual communication.

### **Museum, Archive, and Library Digital Collections**

Many museums, archives, and libraries have online digital collections representing materials in their physical collections. Images may include works of art, artifacts, special collections materials, local history items, and photographs. Images are typically high-quality reproductions taken directly from the originals (or are born-digital originals) and are often accompanied by reliable and in-depth information. Online exhibits help users browse relevant images. Look for open access content; many institutions are making some or all of their images available without restrictions. Museum, archive, and library collections are ideal for academic research and for exploring potential primary source materials.

### **Library Databases and Discovery Systems**

Libraries subscribe to databases, and many contain image content designed specifically for research and academic use. Some databases include only images, and others include images with text. Typically, licensed databases have restrictions on how you can use the images in them. Most do not permit posting their images on the open web but do allow use in presentations, papers, or other projects that will have a limited audience at your institution. Some library discovery systems, such as WorldCat and Primo, index image databases and possibly your institution's digital collections or local image databases. A

## Top Picks: Museum, Archive, and Library Digital Collections

### Digital Public Library of America

Discovery tool that retrieves materials from library, archive, and museum digital collections. Exhibits are based on topics and themes. Check rights statements for individual images.

### Europeana

Cultural heritage portal with images contributed by European museums, libraries, and archives. Rights are clearly indicated and vary by contributor.

### World Digital Library

This project of the Library of Congress, with the support of UNESCO and partners from around the world, aims to make multilingual primary source materials freely available.

### Library of Congress: American Memory

A “digital record of American history and creativity,” including still and moving images, prints, maps, and more. Items from the Library of Congress and other contributing institutions.

### Library of Congress: Prints and Photographs Online Catalog

Pictures in the Library of Congress’s holdings. Includes photographs, prints, drawings, posters, architectural drawings, and other still images.

### National Gallery of Art: NGA Images

Open access digital images of the collections of the National Gallery of Art (U.S.).

### NYPL Digital Gallery

Illuminated manuscripts, historical maps, vintage posters, rare prints, photographs, and more from the New York Public Library. Free medium-sized image download, purchase large-sized.

### U.S. National Library of Medicine: Images from the History of Medicine

Includes portraits, photographs, and art illustrating all aspects of medicine from the fifteenth to twenty-first centuries.

discovery system can be an efficient and powerful tool for conducting image and text research concurrently. Determine how your library discovery system treats image content and what sources it indexes; then be sure to explore terms of use provided by each source.

## Top Picks: Library Databases and Discovery Systems

### Artstor



Images from museum collections and special contributors across the disciplines. Advanced features allow you to limit by geography, material type, culture, style, and more. Most images can be used for educational purposes only—IAP (Images for Academic Publishing) are an exception.

### AP Images



Photographs, audio, and graphics from the Associated Press. Photographs date back to the 1800s and go up to the present date.

### Library Catalogs



Some library catalogs index image databases, such as Artstor, and library digital collections. Explore your library's discovery system to see how it handles image and media content.

## Image Search Strategies

Much of what you already know about search strategies translates to searching for images, but there are some specific tips, tricks, and approaches to keep in mind when looking for visual materials. To find images, it is important to understand how images are typically described, how search engines and databases retrieve images, and the limitations of different types of sources.

Images are retrieved through searching the text that accompanies them, including captions, titles, tags, descriptions, surrounding text, the web page that the image is embedded in, html markup, and other types of metadata. Images are typically not cataloged with controlled vocabularies the way books are. The text that does accompany an image is usually general topical text. Visual components and subjects of images are rarely described in detail. Features we rely on to retrieve text materials, such as full-text searches, are not available with visuals. Finding images in this environment becomes challenging when textual elements are missing or lacking in quality, or when the words used to search for an image do not match the words that accompany the image.

**Activity 2.4: Understanding Image Descriptions for Smarter Searching** delves into the role of text in image discovery.

Image-specific search tools provide expanded and unique options for discovering visual materials. There are times when a visual search is the only way

to access color or other image specifications and design features. For example, imagine that you are looking for a photo of a green landscape. Google Images can retrieve images by color through its combined application of text and visual search algorithms. Flickr would be another good bet for this type of search because it employs user-generated tags and descriptions that often capture color or design elements. In contrast, library databases typically include context-based information about images alongside text-only retrieval options, so searching for attributes such as an image's color will get you nowhere. Students' search experiences with library databases will be entirely different from their experiences with image search engines or image sharing sites, and you'll want to expose them to multiple approaches to finding images. Use **Activity 2.5: Reverse Image Searching** to practice visual search strategies and to analyze how advanced visual search functions can be useful for research.

Keep the scope of different types of search engines and sources in mind. Internet image search engines do not index all images on the Web. Digital image collections provided by libraries, archives, museums, galleries, and stock photo sites, for example, are often hidden because search engine crawlers cannot retrieve content within databases. These databases have to be consulted individually or accessed by way of alternative indexing systems, such as library discovery platforms, or portals such as the Digital Public Library of America.

Remember, too, that not all visual content is available digitally or online. Particularly with specialized research, you may need to consult institutional archives, special collections, books, or other print sources. Your library's print collections can offer millions of quality visual materials, ranging from art reproductions to maps, drawings, and photography. To find books with image content, try searching for a topic and adding "ill." or "illus." These abbreviations are often included as part of the physical description of the book in the catalog record. Another trick of the trade is to use the Library of Congress Subject Heading "Pictorial Works." You can deploy these strategies when searching large corpuses of digitized print books that use subject indexing, such as HathiTrust, and for smarter searching in tools such as Google Books.

## Keeping Track of What You Find

Tracking your image research provides big payoffs down the road. Maybe you've been in this situation: You have an image on your desktop that you saved a long time ago and now you want to include it in a new presentation, but you're having difficulty citing it because you can't remember who the creator

## Image Search Principles

Keep these principles in mind to find the right image.

### CONSIDER RIGHTS ISSUES

Before you start to search, think about how you'll be using the images and whether you'll need Creative Commons or open usage rights. If so, you'll want to search sources with open content first.

### ENGAGE IN "PRE-SEARCH"

Do some exploratory searching to familiarize yourself with the search features—use filters, facets, and advanced search features wherever possible. Recognize that text and images often appear together, so text sources are a great way to discover images. Use reference and topical sources to generate lists of images to find.

### READ THE TEXT

Descriptions and metadata that accompany images are essential for searching and finding images. Be mindful of the role that text plays in connecting you with visual content to improve your search results.

### START SMALL

You may be accustomed to finding articles by entering a full citation into a search engine and going directly to the item you need. This strategy does not work with images. Start with one or two keywords, and narrow and filter from there.

### USE LATERAL THINKING

Consider individual, company, organizational websites as well as specialty blogs or news sites that cover your topic. Uncover images by adding "archive," "database," or "gallery" to a topical web search, then search the archive or image database itself to find the images you're looking for. Use reverse image searching to find other instances of an image online.

### KEEP TRACK OF SUCCESSES

Did you find the perfect source for images in your discipline? Maybe you found a handful of images that will be perfect for your next presentation. Whatever the case, make a note of it. Keep track of useful images, sources, and the information you'll need for citations. When you come back to images later, you'll be glad you recorded the essential information about them.

is, what it's called, or even where you found it. Avoid these problems and save yourself time by designating a system and place to save images and accompanying information *as you find them*.

Use tools that are already part of your everyday workflows, and encourage students to do the same. Are you or your students always on Google? Use Drive to save a folder of images and a doc to track the information and links. Do you use Pinterest regularly? Set up a space just for your work- and image-related pictures and links. Or try using Padlet to drop in images as you find them—they'll be available for later reuse with a link; there's no need to download the image and transcribe the information separately.

Create a running list of image sources that consistently yield useful results for your purposes. If Wikimedia Commons comes through for you every time, keep that information handy. When students need contemporary art inspiration for creative projects and you notice that Artsy helps, add it to your research guide. Maybe you're working with nursing students, and you see that they gravitate toward the medical history galleries of Wellcome Images; you want



## COFFEE BREAK!

### Image Storage Practices

Take a quick inventory of how and where you store images and information.

List all the locations where you currently keep images:

|       |       |       |
|-------|-------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Do you have a system for keeping track of images?

What about image information? If you wanted to reuse an image, can you quickly access rights and citation information?

Identify two tools you use every day.

Would either of these tools help you streamline your image and information storage?

to make sure you can point next year's students to the same resources. Having a system for remembering the best sources for your students and for your own projects ensures that you'll easily find new images the next time.

Whatever your system, use it consistently. Image content can be integrated into every aspect of scholarly work and intellectual life. Getting a handle on the proliferation of choices and possibilities brings you closer to a productive use of images, and streamlining your processes makes your use of visual content that much easier. If all else fails and you've lost track of an image, try tracking it down with a reverse image search.

## Next Steps

Image research is not a single-search-then-find process. Rather, it is an iterative process integral to academic research and knowledge production. To move forward with finding images, try the following:

- Take the time to plan your next image search and keep track of your results.
- Try a new search strategy, image source, or tool.
- Research the topic to generate more image ideas, and model this approach for students.



### MORE TO EXPLORE: GUIDES TO IMAGE RESOURCES

#### DIGITAL IMAGES COLLECTIONS GUIDE

ACRL's Image Resources Interest Group hosts this guide on ALA Connect. Image resources are organized by subject with a table of contents, and each source includes a link and description. Initially developed by Scott Spicer, University of Minnesota, and maintained by community members.

#### IMAGE SOURCES AND RIGHTS CLEARANCE AGENCIES

The College Art Association maintains this list of sources of art images for publication and teaching. Each source is accompanied by a description of its content and a summary of rights information.

#### OPENGLAM

The Open Knowledge Foundation's OpenGLAM initiative works to open access to cultural heritage. The initiative's monthly Curator's Choice series highlights open image content in institutions around the world.



**ACTIVITY 2.1**

# Preparing for Image Searching

## LEARNING OUTCOMES

- Describe an image need and visualize possibilities.
- Translate visualization into words to prepare for image research.

## DESCRIPTION

Get students ready to search for images by providing a few prompts to generate keywords. Students think about how an image needs to look, what it needs to communicate, how it will be used, and what purpose the image will serve in their overall project. Students also need to understand the difference between open and restricted images. This activity gets students in the habit of recording evolving search ideas as they find images.

## TIP FOR SUCCESS

- Encourage students to think broadly about possible image content and to generate a variety of terms to describe what they are looking for. Considering people, actions, places, concepts, and color can help.

## VISUAL LITERACY STANDARDS CONNECTION

- ACRL Visual Literacy Standard 1
- ACRL Visual Literacy Standard 2

# Preparing for Image Searching

Complete the following activities *before* you search for an image. Organizing your thoughts and articulating what you are looking for saves time and frustration.

Describe the image you need, how you will use it, and what it might look like:

Do you need an open (unrestricted) image available for reuse?

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Brainstorm a few descriptive words you might use for your image search:

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---

---

As you search, capture new ideas for keywords and describe relevant images you find:

**EXAMPLE**

# Preparing for Image Searching

Complete the following activities *before* you search for an image. Organizing your thoughts and articulating what you are looking for saves time and frustration.

Describe the image you need, how you will use it, and what it might look like:

I'm giving a presentation for my business class and need an image for risk-taking. I want it to show the benefits of risk-taking and forging a new path. I plan to post the presentation online and use it in my portfolio. I have an idea of a skier on a steep mountainside on a sunny day with ski tracks behind her.

Do you need an open (unrestricted) image available for reuse?

Yes, I plan to post this online and use it in my portfolio.

Brainstorm a few descriptive words you might use for your image search:

skier, skiing, powder, downhill, backcountry, extreme, mountain, recreation, risk

As you search, capture new ideas for keywords and describe relevant images you find:

I tried fly-in, resorts, ski guides, winter sports . . . and searched for "taking risks." Images of tightrope walking came up—they looked in line with the points I'm trying to make, so I started exploring them. I didn't want to use a generic image, so I did a new search to find good tightrope-walking images. I used the keywords tightrope, skyscraper, balancing, risk, chance.

## ACTIVITY 2.2

# Exploring Digital Image Sources

### LEARNING OUTCOMES

- Describe features of online image sources.
- Consider the types of images available and the terms of use.

### DESCRIPTION

Explore an image database such as Artstor or your library's digital collections. Use search, browse, and any online exhibit features to explore the kind of image content available. Point out where to find terms of use or license restrictions. Form groups and give each group an **Exploring Digital Image Sources Worksheet** along with one or two image sources from this chapter's "Image Sources" section to explore. Ask students to follow your example to find out about the source, the kinds of images it contains, and ways of finding those images. Students also try to find an image appropriate for the course or assignment as they explore the source. Students briefly share their image source with the class and fill out the rest of the worksheet as their peers share their assigned image sources.

### TIPS FOR SUCCESS

- Ask students to think about search terms, browse functionality, image quality, metadata, scope, authority, provenance, and terms of use as they explore and compare image sources. This chapter's "Image Sources" section covers key characteristics to guide your discussion.
- If using Artstor, students will need to create personal logins to download and save images to groups. Once images are saved into a group, students can easily download the group of images into a PowerPoint file.

### OPTIONAL EXTENSIONS

- Use the Artstor support materials (<http://support.artstor.org>). The Training and Finding sections are especially applicable.
- Instruct students to find and select three images that demonstrate different aspects, perspectives, or approaches to a theme or topic, then ask them to explain their choices to the class in person or by means of a course website.
- Use the activities in chapter 5, "Cite and Credit Images," to show students how to cite the images they find.

### VISUAL LITERACY STANDARDS CONNECTION

- ACRL Visual Literacy Standard 1
- ACRL Visual Literacy Standard 2

**WORKSHEET**

# Exploring Digital Image Sources

Step 1: Fill out the image source chart.

| IMAGE SOURCE | TYPES OF IMAGES | SEARCH FEATURES OR CHALLENGES | TERMS OF USE OR LICENSE RESTRICTIONS |
|--------------|-----------------|-------------------------------|--------------------------------------|
|              |                 |                               |                                      |
|              |                 |                               |                                      |
|              |                 |                               |                                      |

Step 2: Take note of specific images you found that are relevant to your assignment in this course.

**EXAMPLE**

# Exploring Digital Image Sources

Step 1: Fill out the image source chart.

| IMAGE SOURCE  | TYPES OF IMAGES   | SEARCH FEATURES OR CHALLENGES   | TERMS OF USE OR LICENSE RESTRICTIONS  |
|---------------|---|---|---|
| Google Images | Lots of images from the web.  | It is easy to search!<br>Can filter by size, color, rights.   | Can be hard to find high-quality images and know where they come from.  |
| Flickr        | Mostly photos that people take and upload to the site.<br>Lots of different subjects. | Explore categories, Camera finder, Galleries, Advanced Search. Many images to sort through to find what you need.   | Anyone can post images here so not sure about how we can use them and cite them.<br>Can limit to Creative Commons though. |
| Artstor       | The images are high quality and have information about title, creator, etc.           | The zoom feature shows details. Featured Groups were interesting, but not relevant to our topic. We had to try different terms to find images on our topic and didn't find that many. It took us a while to figure out how to download the image. | Looks like you can only use the images in the classroom and papers? That won't work for everything we want to do.         |

Step 2: Take note of specific images you found that are relevant to your assignment in this course.

## ACTIVITY 2.3

# Finding Creative Commons Images

### LEARNING OUTCOMES

- Find images to reuse.
- Identify restrictions for image reuse.

### DESCRIPTION

Begin by reviewing basic information about copyright and Creative Commons images. Review the four features, and accompanying symbols, that govern Creative Commons licenses (see chapter 4, “Ethical Use of Images”). Then show how to search for Creative Commons in Flickr by filtering to Creative Commons–licensed content. Point out where to locate the license associated with an image. Give students time to complete the **Finding Creative Commons Images Worksheet**, and discuss results.

### TIPS FOR SUCCESS

- This activity can be conducted using a different image sharing site, such as Wikimedia Commons, or an image search engine, such as Google Images.
- Depending on the resource used, the background and search information will need to be adjusted accordingly (e.g., students may need to be able to identify public domain images).

### OPTIONAL EXTENSIONS

- Ask students whether they would share (or have already shared) their own photographs under a Creative Commons license. If so, which license would they choose?
- In addition, you can show students ways to attach a Creative Commons license to their work in Flickr or another image sharing site.

### VISUAL LITERACY STANDARDS CONNECTION

- ACRL Visual Literacy Standard 1, Performance Indicators 1 and 2
- ACRL Visual Literacy Standard 7, Performance Indicator 1

**WORKSHEET**

# Finding Creative Commons Images

Search Flickr for a Creative Commons–licensed image. Capture as much information as you can about it.

Title: \_\_\_\_\_

Creator (real name, if available; Flickr username if not):

\_\_\_\_\_

URL: \_\_\_\_\_

Type of Creative Commons license: \_\_\_\_\_

In your own words, what does this license permit you to do with the image?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

For what type of project can you imagine reusing this image?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**EXAMPLE**

# Finding Creative Commons Images

Search Flickr for a Creative Commons–licensed image. Capture as much information as you can about it.

Title: Panda Bear at the ChongQing Zoo; Chongqing, China

Creator (real name, if available; Flickr username if not):

atlassb

URL: www.flickr.com/photos/atlastravelweb/3263611279

Type of Creative Commons license: Attribution-No Derivative

In your own words, what does this license permit you to do with the image?

Share, but I have to follow the license terms, which say that

I have to give credit and indicate if I make changes to it.

If I build upon this image to create something new, I can't distribute it.

For what type of project can you imagine reusing this image?

This would be good for a presentation about pandas.

## ACTIVITY 2.4

# Understanding Image Descriptions for Smarter Searching

### LEARNING OUTCOMES

- Recognize the role of textual information in providing access to image content.
- Identify types of textual information and metadata typically associated with images.

### DESCRIPTION

Select an image that is described with subject terms or controlled vocabulary. Show the image to students without the metadata, then ask students to describe the image by writing all words that come to mind when they look at it, including not only what they see but also where the image is located, who created it, when it was made, and so forth. Students use the **Understanding Image Descriptions for Smarter Searching Worksheet** to compare their list with the subject terms and discuss differences and similarities in their descriptions. Then review the fundamentals of controlled vocabulary to illustrate why the keywords that students have generated may not match the controlled vocabularies used in the image database. If you're working with a database that uses a thesaurus or controlled vocabulary, show this to students so they can use this feature in other contexts. Note that most images are not fully cataloged with controlled vocabularies.

### TIP FOR SUCCESS

- Use an image with rich metadata using controlled vocabularies, from a library digital collection or a subscription image database such as Artstor. Farm Security Administration/Office of War Information (FSA-OWI) photographs from the Library of Congress also work well for this activity. Note that these images appear in different collections with varying levels of description, including many university library collections and Flickr.

### OPTIONAL EXTENSIONS

- Repeat the activity with an image that has associated user-generated tags—use Flickr, Wikimedia, or another contribution-based image source. During discussion, emphasize that user-generated tags are a common feature of image description and require image researchers to search with synonyms, use multiple search terms, and deploy browse features.
- Incorporate Photogrammar, a free tool developed at Yale that uses Library of Congress FSA-OWI photograph metadata to provide expanded access points to this historical photograph collection. Note how metadata impact access to photographs by geographic location, photographer, date, or subject. Select a photograph to explore the metadata and the “similar photographs.” How might these similarities be determined? Through metadata? A visual algorithm? Other ideas?

### VISUAL LITERACY STANDARDS CONNECTION

- ACRL Visual Literacy Standard 2, Performance Indicator 2

# Understanding Image Descriptions for Smarter Searching

Spend a few minutes looking at the image. Describe it by writing down as many words or phrases that come to mind:

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How do your descriptive words compare to the terms used in the actual image description?

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What is the role of the textual information (metadata) that accompanies the image?

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How can you use what you've learned about image description to improve your future searches?

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## ACTIVITY 2.5

# Reverse Image Searching

### LEARNING OUTCOMES

- Practice reverse image searching.
- Consider potential applications for reverse image searching.

### DESCRIPTION

Begin by demonstrating a visual search in Google Images. Point out key ways to view matching or “visually similar” images. In groups, students find an image related to the course content, then use that image to do a reverse image search using the **Reverse Image Searching Worksheet**. As a class, students share their findings and brainstorm potential uses for reverse image searching in their academic work. Use the discussion prompts to start the conversation and help students reflect.

### DISCUSSION PROMPTS

- How might a reverse image search like the one you just did lead you to more information or ideas for research?
- In what other ways might an image search engine be useful to you in your academic work?

### TIPS FOR SUCCESS

- Before class, find several relevant images and perform a reverse image search with each one to make sure you retrieve results that will be useful.
- Prior to leading the discussion, consider the responses you hope to elicit from the prompts, such as finding better image sources; tracking down an original image; locating higher quality, or larger, versions of an image; finding citation information; and identifying instances of plagiarism.

### OPTIONAL EXTENSIONS

- Try this activity with TinEye Reverse Image Search (<https://www.tineye.com>) and compare results.
- Use the Google Image Quiz (<http://google-image-quiz.net>) as a warm-up. This dynamic game, created by Italian artist and researcher Silvio Lorusso, is a twist on the reverse search concept. You see an image and guess the Google query that retrieved it.

### VISUAL LITERACY STANDARDS CONNECTION

- ACRL Visual Literacy Standard 2, Performance Indicators 1 and 2

# Reverse Image Searching

Find an image related to your research topic, then perform a reverse image search and explore the results.

What options are there for narrowing and filtering the results?

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Look at the image measurements. What is the range of sizes available for this image?

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Can you find images that are visually similar? What do you notice about the similar images?

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What is one website that includes your image?

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List one new idea or one question that this reverse image search raised:

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