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The Sorting Machine

An information literacy lesson plan for first-year students

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Overview

"Let's play a game," the librarian says. "I've just told you about the kinds of things you can find in the library. Now, can you tell me which is which?"

In this game, students are given a mixed-up group of items, and are asked to correctly sort the items into several piles. You choose the categories for the piles! Possible categories include Popular and Scholarly, or Primary and Secondary and Tertiary. The students work as a team, striving for both accuracy and speed. They don't leave their seats, but instead pass items to each other, like a bucket brigade. Students examine each item that's passed to them, determine which category the item belongs in, and then pass the item toward the correct pile. In effect, the entire class becomes a "sorting machine."

Audience: First-year college students.
Classroom time: 25-30 minutes.
Frames: Information Creation as a Process, Searching as Strategic Exploration
Learning outcomes:
- Correctly categorize library items.
- Describe the different role that each category plays in the research process.
- Discuss how particular items could be used in the research process, in the context of each item's category.

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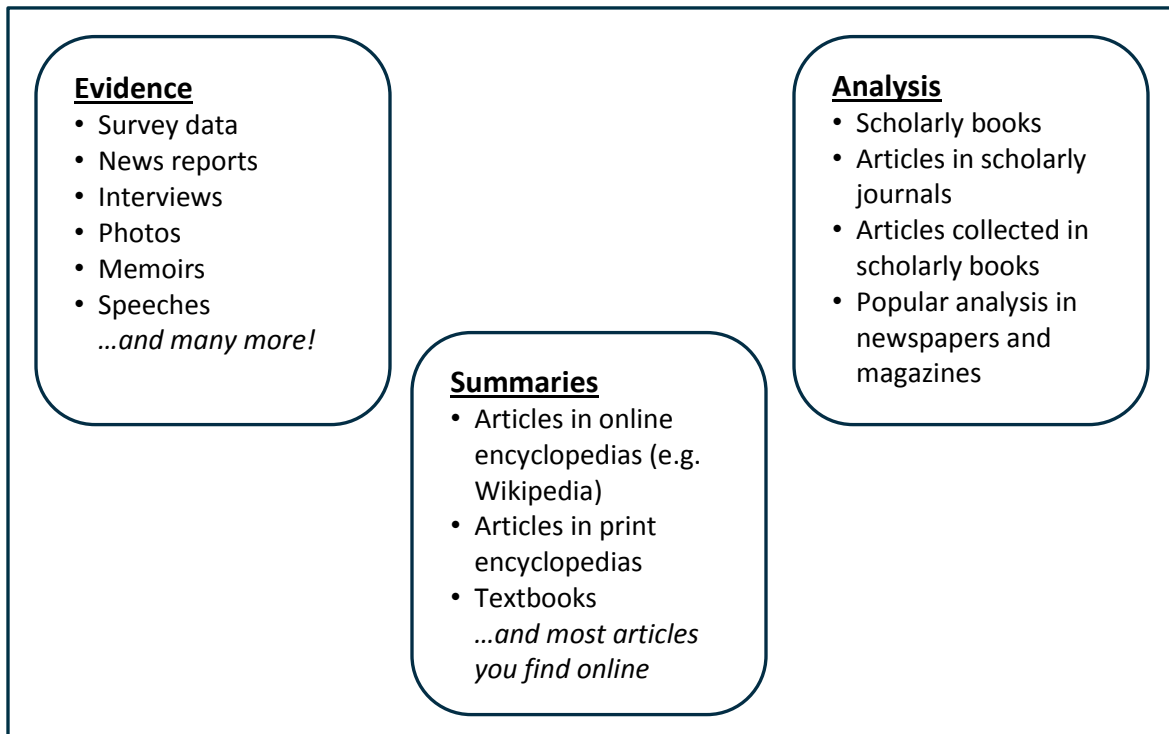Special Collections: (540) 654-1752
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Materials

For this lesson, you will need:

- A cart full of **miscellaneous library items**.
  - This can include both print items and printouts of electronic items.
  - The number of items should be about the same as the number of students.
  - Select the items carefully. (See "Preparation," below.)
- A **slide** showing the categories that you want to want the students to learn. The slide should name the categories and provide examples for each category. (See "Slide example," below.)
  - The names that you give for each category can be standard library terminology, or they can describe the functions of the items.
    - For example, you could call your categories "Primary" and "Secondary" and "Tertiary," or you could call those same categories "Evidence" and "Analysis" and "Summaries," which describe their functions.
  - On the slide, list examples of the types of things that belong in each category. Make sure that the examples are relevant to the subject of the class.
    - For example, "Interviews" and "Speeches" would be appropriate examples for a history class but not for a chemistry class.
  - Each category should be in one area of the slide, so that you can use the slide as a map to show where the pile of sorted items should go.
    - For example, if the "Analysis" category is in the top right corner of the slide, you would tell the students to create a corresponding pile of Analysis items in the front right corner of the classroom.

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Slide example

Evidence
- Survey data
- News reports
- Interviews
- Photos
- Memoirs
- Speeches
  …and many more!

Summaries
- Articles in online encyclopedias (e.g. Wikipedia)
- Articles in print encyclopedias
- Textbooks
  …and most articles you find online

Analysis
- Scholarly books
- Articles in scholarly journals
- Articles collected in scholarly books
- Popular analysis in newspapers and magazines

Leave the slide on the screen during the game. Students will use the slide as a map of the classroom and pile their items in the locations shown on the map. In this example, the locations are front left, front right, and back center.

Preparation

First, decide which categories you want the students to learn. Then, select items from your library's collection that belong in those categories.

Use these criteria to select items for the game:

- Each item should belong in one of the categories you've selected.
    - If you want, you can select an item that belongs in more than one category. This may cause fruitful argument among the students, as they disagree about which category it belongs in.
- Choose a wide variety of items, including types of items that you think the students have not encountered before.
    - For example, many first-year students don't know that there are some books that are edited collections of essays. Including such a book in the game gives you an opportunity to plant the concept in their minds.
- You should be prepared to discuss each item. For each item, you should know what type of item it is (for example, a book of essays), and which category it belongs in.
- Some of the items you select for the game should be of the same types as the examples on the slide. These will be easier for students to categorize. Some should be of types *not* listed on the slide. These will be harder for students to categorize.
    - For example, imagine that one of your categories is "Evidence", and the examples you list on the slide are survey data, news reports, interviews, photos, memoirs, and speeches. If one of the items in the game is a photo, students will read the slide and see immediately that the photo goes in the Evidence pile. If one of the items in the game is an archaeological excavation report, students won't immediately know where it goes. They'll have to think about what an excavation report is, and how the Evidence category is defined.
- As you did when you created the slide, be sure to select types of items that are relevant to the subject of the class.

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Lesson outline

Introduction 3-5 minutes	Introduce yourself. Remind the students why they're meeting with you – to learn how to use the library, so that they can do research. If the professor has told you the details of the students' research assignment, remind them of those details. Tell the students that… - As they do research, they will find lots of different items. - These items naturally belong in different categories, and each category should be used in a different way. - It's important to know what the categories are, so that you can look at an item and know how to use it. Show them your slide. Point out each of the categories in turn. Explain what the defining characteristic of each category is, and how to use items in each category. Keep this quick and snappy. Don't let it become a lecture.
Game 5 minutes	*"To help you practice distinguishing between the categories, I brought a game with me."* If possible, have the students move their chairs into a circle, facing inward. You can also play the game with students sitting in rows, but if you do, the students who are sitting at the edges of the room will handle fewer items. Hand out the items you selected for the game. Distribute them randomly. (Make sure they're not still sorted from playing this game with a previous class.) Each student should get one item. *"The object of the game is to sort these items into piles. You'll be working together as a team, trying to beat the clock, and trying to be as accurate as possible."* Point out where you want the piles to go. Tell the students that the slide on the screen is a map of the classroom. Point to each category on the slide, and then point to the corresponding location in the classroom. Be very clear about the locations, and check for understanding before you continue.

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	"There are two rules! 1. *This is a passing game, so don't stand up and walk. Just pass things to your teammates.* 2. *If someone passes something to you, don't trust that it's heading in the right direction! Take a look at it. If it's heading in the wrong direction, pass it right back… but be tactful about it."* (This usually gets a laugh.) *"You have two minutes! On your mark, get set, go!"* Watch the students play the game. Most classes will finish in less than 90 seconds. You may need to remind students to examine every item that gets passed to them, not just the one item they started with. Near the end of the game, only a few of the most difficult items will remain unsorted. When this happens, remind the students to talk with each other and work together as a team.
Discussion 15 minutes	*"You did it! Nice work, team. Now comes the fun part. Let's see how accurate you were."* Pick up each of the piles in turn. Remind the students what the category for that pile is. Then, for each item in the pile, do this: • Hold the item up high, so everyone can see, and read the title. • If the item is in the correct pile, say so. You might also want to praise the students for getting it right, especially for some of the more difficult items. • If the item is in an incorrect pile, say so, but don't tell the students where the item ought to go. Instead, briefly mention a few salient features of the item, and then ask the class as a whole which pile the item should be moved to. • Reveal to the students what the item is (for example, a textbook, or a book of essays, or a book of statistics). Then, ask them whether they would use this type of item to help with their research assignment, and if so, how they would use it. Get the students talking, so that you can gauge their understanding.

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Recap and next steps 3-5 minutes	*"Here's what we just learned."* Using the slide, recap each of the categories. Again, be brief and snappy. By this point, the students should be comfortable with the categories. If time permits, this is a good opportunity to introduce additional concepts. If you do, you may want to use additional slides. Here are a few options for additional concepts: • The standard library terminology for the categories (such as Primary and Secondary and Tertiary). • How the items in each category are created. • How to find items of each category in the library catalog or databases. • How to use items in one category to find items in other categories.

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