Reduction Deduction:
Facets as a Key Ingredient to Searching Effectively in a Discovery Layer

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NUTRITION INFORMATION
One of the benefits of a discovery layer is the large number and variety of results. In order to search effectively, students must learn to narrow down those results in a meaningful way. This activity helps students tap into prior learning by exploring their natural use of facets and limiters in commercial online shopping. Students are then asked to transfer their shopping behaviors into the discovery layer using the facets and limiters.

Learning Outcomes
Students will be able to:
- Apply a facet/limiter to a search in the discovery layer in order to refine search results.
- Describe three facets/limiters that improved their search results in order to know which facets might be beneficial to future searches.

NUMBER SERVED
This recipe can serve as little as two and as many as needed. It scales easily to large and small classes by increasing the size of the groups or doing the activity as individuals.

COOKING TIME
Prep time: 10 minutes
Cooking time: 20 to 30 minutes

DIETARY GUIDELINES
Frame: Searching as Strategic Exploration

Knowledge Practices:
- Design and refine needs and search strategies as necessary, based on search results.
- Understand how information systems (i.e., collections of recorded information) are organized in order to access relevant information.

Dispositions:
- Understand that first attempts at searching do not always produce adequate results.
- Persist in the face of search challenges, and know when they have enough information to complete the information task.

INGREDIENTS & EQUIPMENT
- Internet access
- Student computers
- Activity worksheet

PREPARATION
The librarian will need to identify shopping scenarios and companion websites that would be familiar to the students. The included activity worksheet presents a set of example scenarios and websites.

COOKING METHOD
1. Icebreaker—2 minutes
   a. Ask the students if they like to shop online and what items they shop for. This icebreaker will encourage engagement early in the session.
   b. Explain the goal for the session—students will explore skills that they use to do online shopping which will improve their research skills.

2. Explanation—2 minutes
   a. Explain that commercial shopping websites are like discovery tools. When students are researching, they are shopping for good sources.
   b. Introduce the idea of limiters as a value-added function of discovery tools. Tell students that they already know how to use them in their personal lives.

3. Activity—5 to 7 minutes
   a. Group students into small teams and give them a worksheet (Figure 1).
FIGURE 1. Reduction Deduction Worksheet

SHOPPING EFFECTIVELY USING FACETS
Instructions: Each group will be assigned one of the following scenarios. Using the website provided, try to find the item using the categories and filters of the website. Take notes on what steps you use so that you can report back to the class.

<table>
<thead>
<tr>
<th>Shopping Problem</th>
<th>Website</th>
<th>Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 Your best friend is getting married and you want to buy them some cookware. Find a stainless steel saute pan for under $200.</td>
<td>williams-sonoma.com</td>
<td></td>
</tr>
<tr>
<td>#2 You need shoes for a formal dinner, but you hate high heels and you have less than $50. You are a size 8.5. Find a women's black heeled shoe that is under 2 inches and in your budget.</td>
<td>zappos.com</td>
<td></td>
</tr>
<tr>
<td>#3 You just joined the Football team. You need new cleats. They have to be Nike brand and match your school colors (black and red). Find the best cleats you can for around $100.</td>
<td>champssports.com</td>
<td></td>
</tr>
<tr>
<td>#4 You finished your midterms just in time to realize that Halloween is coming up and you don't have a costume! Find a scary-themed costume in your size that is under $100. Bonus points if the costume is related to food.</td>
<td>Amazon.com</td>
<td></td>
</tr>
<tr>
<td>#5 You want to buy a used car to get to your job as a chef. You've got $8,000 dollars and would really like a Ford truck. Mileage is also important to you. Can you find a truck that you can afford with less than 75,000 miles?</td>
<td>ebay.com</td>
<td></td>
</tr>
<tr>
<td>#6 Your computer died. You need a new laptop fast! Your culinary university offers a discount if you buy an Apple laptop. What is the lowest cost but highest rated laptop that you can get for under $300?</td>
<td>bestbuy.com</td>
<td></td>
</tr>
<tr>
<td>#7 You got an interview for a full-time job, but you don't have anything to wear. Find a black Calvin Klein suit in your size.</td>
<td>macys.com</td>
<td></td>
</tr>
</tbody>
</table>

SHOP YOUR RESEARCH TOPIC
Instructions: Each individual will apply the limiting techniques from the shopping examples to library searching. Using the library's discovery layer, try to find information sources for your topic. Take notes on which steps you used, and then describe which three steps you found were most helpful for your topic.

<table>
<thead>
<tr>
<th>Topic:</th>
<th>Steps</th>
</tr>
</thead>
</table>

Which three facets/limiters improved your search results? Why were they helpful?
b. Explain that groups have to find the item described in their shopping scenario. Using the website you have given them and by using the facets and limiters of the site.

c. Remind them to take notes about their process.

d. Assign each group one of the shopping scenarios and websites.

e. Groups compete to see who can find their item fastest using the facets and limiters of their assigned website.

4. Demonstration—5 minutes

a. Ask one to two groups to demo their technique of finding their item, teaching each other about the facets they used to accomplish the task.

b. Ask students to research their own topic and explore the limiters and facets.

e. Students fill out the back side of worksheet, describing which three limiters/facets improved their search results and why.

ALLERGY WARNINGS

Commercial websites have a tendency to change rapidly. Be sure to check your example websites before class. Be ready to discuss the function of the facets in your discovery layer. Some are apparent to a majority of students; others are more nuanced.

If students do not have a research topic prepared, have a few examples that they can use in order to experiment with the facets.

CHEFS’ NOTES

Students love this activity because they begin to see the relationship between a natural behavior (shopping) and their assignment (researching). This activity helps with transference, whereby students see the connection between the “real world” and their academic endeavors. Researching becomes less intimidating when couched in terms that they already understand. As a bonus, some students love the idea that they learned how to make their holiday shopping faster and easier.

CLEAN UP

Worksheets are gathered at the end of class to assess the outcomes.