

Contextual Inquiry Study: Student Search Practices


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IDIA 642 / Spring 2011

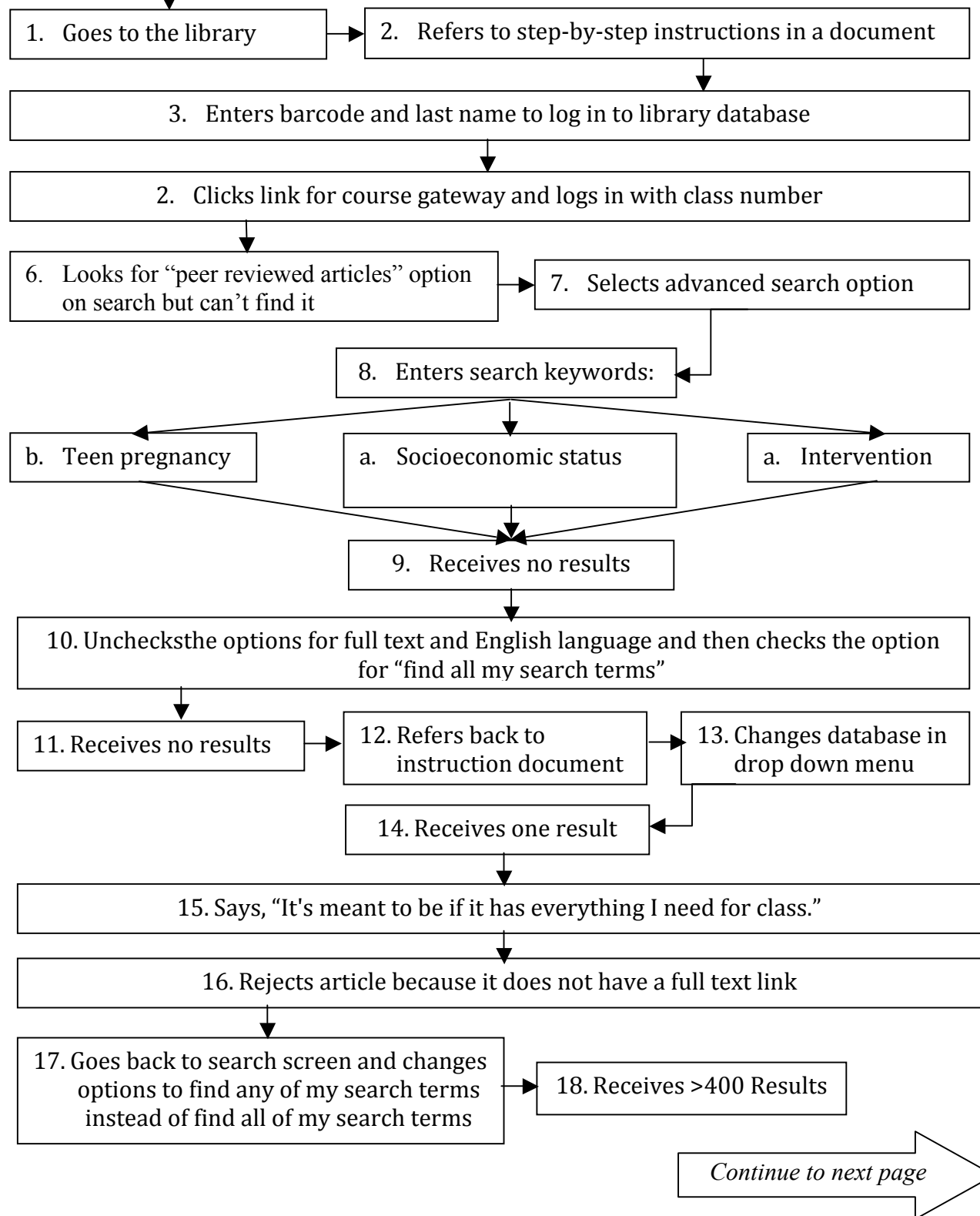
Instructor: Lucy Holman

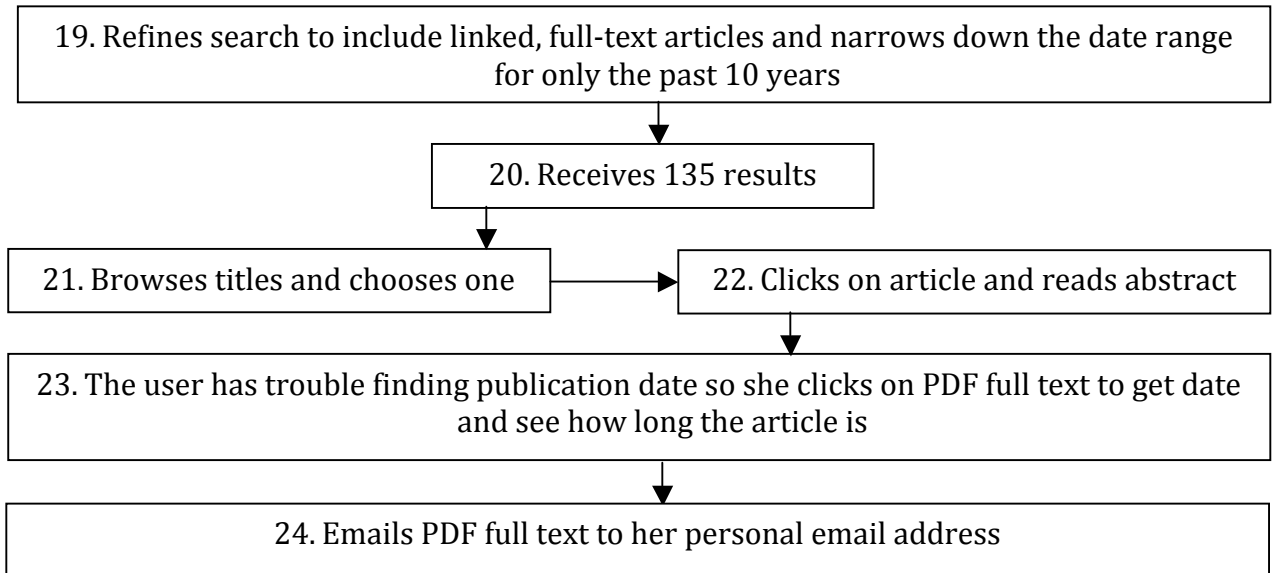
3 March 2011

User Profile / Amy


<p>Amy</p> <p>30/female/single/ Baltimore, MD</p>	
<p>Quote</p>	<p><i>"I am not a person who enjoys school. In fact, I hate it. Yet, I have voluntarily put myself through this torture for the better part of 12 years. This has to be some form of undiagnosed mental illness."</i></p>
<p>Professional Background</p>	<p>Human Resources Assistant at Applied Signal Technology, Inc.</p>
<p>Educational Background</p>	<p>Currently enrolled in her 3rd year in the Community Health Education Masters Program at Towson University. She has a bachelors degree in Pedology from Bowie State University.</p>
<p>Computer User Profile</p>	<p>Computer User Comfort Level: Medium</p> <p>Uses a computer for her job, mainly it for email, Microsoft Excel and Word, and to access the company healthcare and payroll system. She does not use a computer for more detailed projects and does not consider herself "technically advanced."</p>
<p>Research Environment</p>	<p>Currently, most of her schoolwork is done at her day job on her work computer. However, when she is home, she does her homework at her kitchen table using her laptop and a mouse. She prefers to print out readings and use a highlighter to review rather than read them online.</p>
<p>Researcher Profile</p>	<p>Research Level Comfort Level: Low</p> <p>She received one day of previous instruction on Towson Library tools in class, but she has never used them on her own outside of the library. Used a similar database for another class more than a year ago. If she had not received instruction on the Towson Library tools in class, she would have probably use Google search to do her research.</p>
<p>Artifacts</p>	<ul style="list-style-type: none"> • Instruction Research Guide Handout

<p>Task: Use the Towson Research Database to conduct research for an assignment for her Introduction to Health Behavior and Health Promotion class.</p>		
<p>Research Goal: Find a peer-reviewed journal article on a relevant health topic that includes an intervention or study. The article needs to be published within the past 10 years, at least 10-12 pages long, and on a topic that is broad enough to find additional research. Then, write a three-page review of the article. A secondary goal is to find related articles that could potentially be used for a longer literature review assignment later in the semester.</p>		
<p>Scenario: Amy needs to use her college Library database to find an article to review. She sets up her laptop on her kitchen table, gets a Diet Sprite, and sits down to do her research. She keeps the directions for accessing the Towson Library database next to her for easy access.</p> <p>She references her research guide handout and follows the instructions to login to the Library Database. Using the Library Database she searches for the keywords “teen pregnancy”, “socioeconomic status” and “intervention”. She looks for an option to search only peer-reviewed articles, but there is none.</p> <p>Her first two queries returns zero search results. She refines her searches using the search options until she finally gets a reasonable number of results – 135. She skims the first few titles until she finds ones that includes her search terms. Then she and clicks on her chosen articles to read the abstracts. She has trouble finding the date of publication so she opens the full text PDF. When she likes the article and it meets her criteria, she emails it to herself to print out and read work since she does not have a printer or paper at home.</p> <p>Amy searches until she has 5 articles she is happy with. During her search she stops periodically to get up and do other things like laundry, play with her cat, or check her Facebook and email. While she works, she has 12 internet windows open at once.</p>		
<p>Key Findings</p>		
<p>Motivations</p>	<p>Needs / Database Search</p>	<p>Needs / Misc</p>
<ul style="list-style-type: none"> • Dislikes schoolwork so wants research to be done as quickly as possible • Gets less selective (“lazy” in her own words) regarding search query results as time goes on • Wants to get a good grade in her class • Not interested in exploring interface options or, for example, comparing results of different search terms or search domains 	<ul style="list-style-type: none"> • Search based on specific keywords • Search based on date of publication • Search based on length of article • Search based on peer-reviewed • Ability to save results for later • Ability to email and/or print articles out 	<ul style="list-style-type: none"> • Dislikes having to login to the library with pin number because she has to look it up • Needs database to be simple and easy to use • Would like bibliography to be prominent so she could cut and paste it for her paper

Task Flow / Amy

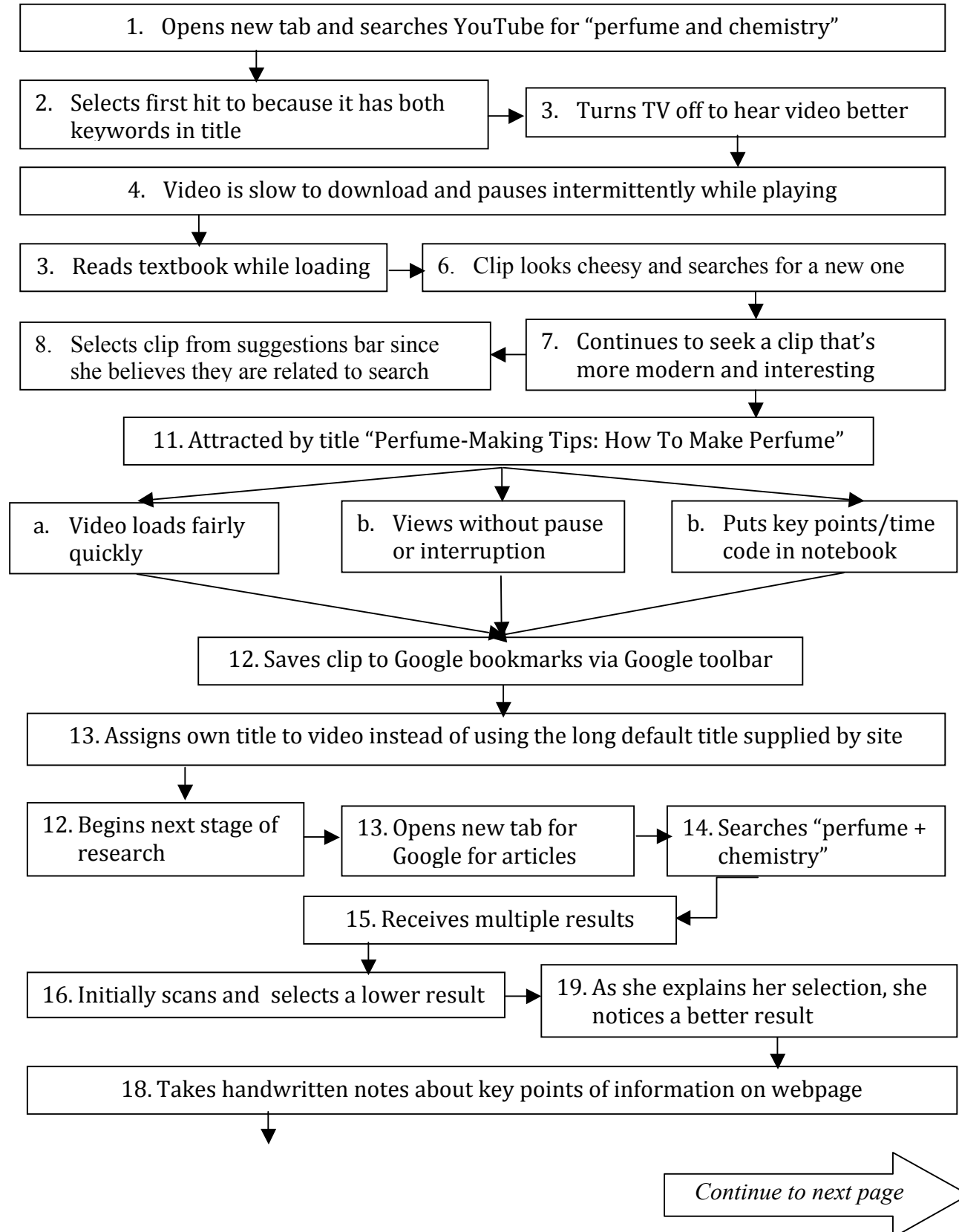


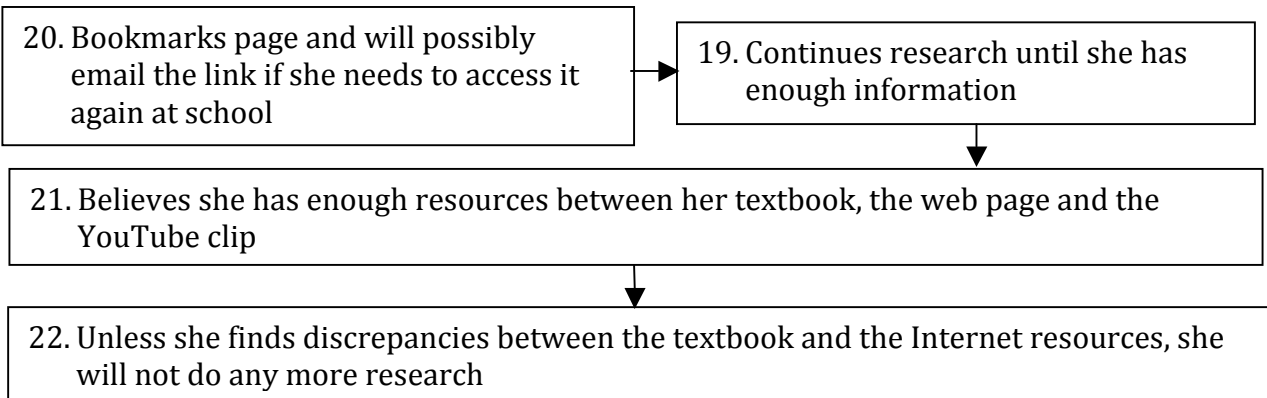
User Profile / Christina

<p>Christina</p> <p>20/female/single/ Baltimore, MD</p>	
<p>Quote</p>	<p><i>"Usually I try to find videos to make it interesting or modern...something that would make my presentation better."</i></p>
<p>Profession/ Professional Background</p>	<p>Full-time student; works part-time as an after-school assistant three times per week</p>
<p>Educational Background</p>	<p>Currently enrolled in her junior year at Morgan State University. She is majoring in special education.</p>
<p>Computer User Profile</p>	<p>Computer User Comfort Level: High</p> <p>Uses a computer for school and personal use. Christina generally uses email, Microsoft Word and PowerPoint at Morgan State.</p> <p>She also frequently uses a computer to access the Internet for communication with friends through email, Facebook, Twitter and other social-media websites. She is also comfortable with using search engines such as Yahoo! and Google.</p>
<p>Research Environment</p>	<p>Christina completes research in her bedroom of an apartment that is shared with sister. She works on bed while lying on stomach with laptop on bed. Later, she shifts to an upright position. The TV is on at the beginning of her research, but she turns it off during the course of session because sound overpowers the videos.</p> <p>Usually works in this setting or at library. Prefers working at home during early stages of research and uses library later if she needs to concentrate.</p>


Researcher Profile	<p>Research Level Comfort Level: High</p> <p>Describes herself as very comfortable doing online research. Identifies Google and YouTube as the exclusive resources that she uses for research.</p> <p>Has used Morgan Library tools or databases for some of her previous courses but not for Chemistry. However, she does use ERIC for all her educational courses. ERIC (the Education Resources Information Center) is an online digital library of education research and information that is sponsored by the U.S. Department of Education.</p>	
Artifacts	<ul style="list-style-type: none"> • Class Syllabus • Textbook • Spiral Notebook 	
Key Findings		
Motivations	Needs / Database Search	Needs / Misc
<ul style="list-style-type: none"> • Find something cool about chemistry and perfume that can be used in the PowerPoint presentation • Find supplement Internet articles that support the information found in her textbook • Looks for a video clip that is modern and interesting to enhance her presentation • Get extra credit 	<ul style="list-style-type: none"> • Search based on specific keywords • Selections based on length of video • Websites chosen based on confirmed validity of site – wants facts instead of people’s opinions • Ability to bookmark or email results for later 	<ul style="list-style-type: none"> • Have quality Internet services to provide smooth streaming to watch YouTube videos • Access to chemistry textbook to ensure that she is finding quality, supportive information • A notebook to write points and ideas about information found on Internet and read in textbook

Scenario / Christina
<p>Task: Deliver a 3-4 minute PowerPoint oral presentation in Chemistry class at the end of the semester. Students select a topic from a list provided within the syllabus.</p>
<p>Research Goal: Begin research for the presentation on the topic of how chemistry interacts with Perfume. Christina said that she would not generally start the research this early; instead, she would begin around Spring Break. Therefore, she is seeking the foundation elements of her project – topic and multimedia.</p>
<p>Narrative: Christina describes how she would begin by reading relevant portion of textbook and take notes in notebook prior to beginning Internet search. However, this step skipped because she is beginning her research so early. She begins with YouTube by searching for “perfume” and “chemistry.” The first hit had both of her keywords in title so selected that to view. The video does not download quickly and it keep pausing while it was plays. This video seems “kind of cheesy” so she decides to continue looking for different multimedia to add to her presentation. She explains that she looks for a video that is “interesting” or “modern” to enhance her presentation.</p> <p>She selects the eighth clip from the suggestions sidebar, which is called “Perfume-Making Tips: How To Make Perfume,” because she believes this would be almost like chemistry lab. This video loads fairly quickly, and she is able to view it without interruption. She writes the key points and time codes in her notebook as she views it. She saves the clip to her Google bookmarks via the Google toolbar, and she assigns her own title to the video.</p> <p>Christina then begins her next stage of research using. She uses the search phrase “perfume + chemistry”. She learned in the eighth grade that using “+” operator provides better results. Initially, Christina gravitates toward a lower hit that seems to match what she wants. While explaining how she made her determination, she notices that the top hit sounds like an even better source and selects that one instead. She describes herself as “scanning” the search results and indicated some of her criteria:</p> <ul style="list-style-type: none"> • Ignores Amazon results because they are probably books • Tries not to use Yahoo Answers or Ask.com because they are not reliable sources since people put in their opinion. • Also mentions Wikipedia as another less reputable source. She says, “any person can put whatever on there. I don’t want false information.” <p>Christina takes handwritten notes summarizing the points from web page. These will form the basis of her presentation. She also bookmarks the page and sometimes emails links to self to use at school or other computers since she does not take laptop to school. She will continue to research until she feels that she has enough information. She feels that between her textbook, the web page and the YouTube clip, she probably has enough resources for her presentation unless she later finds discrepancies between sources. Then, she will do some more research.</p>

Task Flow / Christina



User Profile / Kat

<p>Kat</p> <p>32/female/single Baltimore, MD</p>	
<p>Quote</p>	<p><i>"I'm looking for something that would put a creative edge to writing about this."</i></p>
<p>Profession/ Professional Background</p>	<p>Management Analyst at the Center for Medicare and Medicaid. Works full time, with a regular daytime schedule.</p>
<p>Educational Background</p>	<p>Currently 2nd semester MBA student at UB, concentration in marketing.</p> <p>Undergraduate degree in creative writing, Salisbury University</p>
<p>Computer User Profile</p>	<p>Computer User Comfort Level: Medium</p> <p>User is comfortable using her computer and can work rapidly: switching between tabs/applications easily. She relies on the browser Back button quite a bit when navigating search results.</p> <p>She appears to rely on default settings for browser, search engine. She uses Bing toolbar but does not remember how/why she installed it.</p> <p>She prefers to do brainstorming/composing in longhand in her notebook, saying she cannot do "creative" work on the computer.</p>

Research Environment	<p>Kat typically works using a laptop (Windows) while seated on her couch in her apartment.</p> <p>Course textbook and notebook are kept nearby and consulted frequently while working.</p>	
Researcher Profile	<p>Research Level Comfort Level: Medium</p> <p>She describes herself as comfortable doing online research but has not found any reason to use tools besides standard search engines (Bing, Google). She does not use any advanced search features like phrase matching, filters or Boolean logic.</p>	
Artifacts	<ul style="list-style-type: none"> • <i>Organizational Behavior</i> (course textbook) • Notebook • Assignment sheet 	
Key Findings		
Motivations	Needs / Database Search	Needs / Misc
<ul style="list-style-type: none"> • Strong desire to find a topic or angle that is “creative” and original. Avoids topics that have been “done to death.” • Wants to do well in the class (spoke of doing extra work in order to earn additional points). • Picky about sources, but in a personal way. Considers sources she's heard of as trustworthy. Didn't trust a source from a college website but trusted Wikipedia. 	<ul style="list-style-type: none"> • Relies on basic keyword search. • Interested in current events and popular culture results more than scholarly research. • Does not make use of either browser bookmarks or site-based tools for saving results (copies URLs to blank Word document). 	<ul style="list-style-type: none"> • Works in a very exploratory manner: changes search terms, sites and strategy frequently if not finding appropriate results. • Uses computer only for searching. Does brainstorming and composing offline.

Scenario / Kat
<p>Task: For a class in Management & Leadership, Kat is required to make regular blog postings connecting course concepts to current events. She is conducting research for a posting on job dissatisfaction and workers' reactions, which was recently covered in class.</p>
<p>Research Goal: Kat is just beginning her research for this particular posting, so she is doing a preliminary search for possible "tie-ins" for this topic. Students were not given any specific guidelines regarding sources, topics, or posting length. She described herself as looking for a "spark" or "big idea" around which she could construct her posting</p>
<p>Narrative: Kat begins with a search in Bing for a concept covered in her class (the ELVN model). She receives no results so she tries more generalized search terms – job dissatisfaction reactions. She quickly examines a few results but rejects them as not useful.</p> <p>She recalls seeing a site with interesting articles on jobs, but cannot remember its name so she uses Bing search to find site (CareerBuilder.com). She tries both searching and browsing CareerBuilder site but is frustrated by results. She tries using Bing to find suitable articles within CareerBuilder site (career builder job dissatisfaction reaction) but is still not satisfied with results. She then thinks she may be remembering the wrong name of the site. She tries Bing search for 'monster job dissatisfaction reaction' to see if there are results on Monster.com. She follows a link to article on Bloomberg and gets distracted by unrelated search results. Kat switches to Google and repeats last search. She looks at a couple sites but they still aren't what she is looking for.</p> <p>Kat refers back to notes and textbook. She switches back to Bing and tries new search (famous people job dissatisfaction), finds an Anthony Robbins quote about job stress and heart attacks, and that seems like a candidate for her topic. She continues to search Bing for Anthony Robbins and finds official site. She opens a blank Microsoft Word document, copies Robbins quote and the link to source.</p> <p>She returns to search and tries new search related to quote (heart attacks and job satisfaction). She finds article on heart attacks and high stress jobs, copies link to article into open Word document along with brief note about content. She repeats search once again and scans and rejects a few more articles.</p> <p>She tries a new Bing search (heart attack reasons) and finds PDF article on job stress. She uses the in-document search feature to skim article for relevance. Ultimately, she rejects the article as not relevant.</p> <p>The session is now stopped due to time. Due to unsatisfying results, Kat said she would probably just start again from scratch the following day.</p>

Task Flow / Kat