

## Information Needs Assessment in Daily Life Interview with a Job Hunter

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### Problem Statement

The purpose of this case study is twofold. First, it is to apply Grover's "Model for Diagnosing Information Needs," to a real individual's search, to evaluate the searcher's results, and then to suggest what steps an information professional might take to improve them. According to Grover (as cited in Thomas, 2004), assessing information needs is a four step process that includes 1) diagnosis, 2) prescription, 3) treatment and 4) evaluation. This process loops indefinitely until a solution is achieved. Grover's model is user-centered and proposes that assessment should, "include the individual's literacy level, developmental level, cognitive style, worldview, format preference, culture and technological skills," as well as factors such as, "age, gender and communication style," (p. 63).

Second, using data collected from the searcher, this paper will analyze the various models of information seeking behavior introduced in the class, "Theoretical Foundations of Service: Diagnosis & Customization," paying special attention to Carol Khulthau's theories about the Individual Search Process. Carol Khulthau (as cited in Thomas 2004) is responsible for raising awareness about the affective dimension of the search process. In her theory, there are many stages of the Information Search Process (ISP). Each stage is associated with an emotion such as anxiety, optimism, or confusion. Even the most exceptional students and researchers at some point in their search must overcome a dip in confidence and task clarity. She described these dips as "Danger Zones" (p. 35). One criticism of Khulthau's work is that she designed and tested her model primarily on high school students doing scholastic research, and it has not been extensively tested on subjects other than students doing research (p. 40).

In order to apply Khulthau's model of information seeking to a non-academic context, I asked Jacob<sup>1</sup>, a 23-year-old student finishing up his Bachelor's degree in Environmental Science, if he would share the different steps of his job search with me. The subject recently completed an internship with the Oregon Department of Transportation (ODOT), moved back home, and described himself as a "starving student trying to find work." In

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<sup>1</sup> The subject's name has been changed to protect his privacy.

July, when his internship ended, he began searching for work by checking websites and sending out resumes every week. Jacob's search requirements are: the job must be in his field, must not require graveyard shifts or standing for many hours and must be accessible by public transportation. Initially, he was also looking for a job that would pay at least as much as he made at his internship. He anticipated that it would take him three months to find this job. However, in October, after the three month period had been reached and he had only had one interview, he began looking for any job that would allow him to gain additional experience, even for lower pay. While he admitted that, on the one hand, he was not constrained by time because he is allowed to live at home; on the other hand, he disliked living off his parents and being on a tight budget.

### Jacob's Search Strategy

The first step in Jacob's search process was to consult with family members and friends about the best way to get a job. He based his expectations for his own search on the stories they told him about their job hunting experiences. For instance, Jacob's sister recently found her job by looking on Craigslist.com, therefore Jacob regularly checked Craigslist.com. Because he knows and trusts that his friends and family have his best welfare in mind, he believes they will be most able to help him.

The subject's primary search strategy was word-of-mouth. Therefore, the places that Jacob regularly looked for jobs were: Craigslist.com because his sister found her job there; Monster.com and USA.com because they were recommended by one of his best friends; and the Oregonian because his family has subscribed to it for 30 years. He noted that Jobdango.com, the only source that he found through an ad and used without an endorsement by a friend or family-member, has been "the least useful."

In addition to getting leads from friends and family, Jacob stayed in contact with his supervisor and several co-workers from his internship. One of his co-workers at ODOT suggested that he would improve his chances of getting a job by taking classes to earn a certification in Wetland Mitigation. Jacob was pleased that this advice was more than he had asked for, and stated, "She pointed me to what I want to do and how to get it." It was through this same co-worker that he first learned about government job boards, and how to look up unfamiliar requirements from job ads. He also has a friend who works with the Red Cross, who he said would keep "an eye out" for him. Although these sources had not yet passed on any solid leads to him at the time of our first interview, he was optimistic that at some point in the future, they would.

When I asked Jacob if he would consider using search strategies other than just looking in the paper and using Internet sources recommended to him by word-of-mouth, he said, "I would not look harder, I would use the same strategy for longer." Then he declared that as a last resort, if his job search did not yield any helpful results after enough time had passed, he was considering going back to school to pursue another degree. Throughout my observations of his search process, Jacob was highly optimistic about his possible chances for success, but repeatedly expressed feelings of deep discouragement and personal frustration with his actual findings. By our last interview, Jacob had decided

to discontinue his job search and was looking into his options for post-undergraduate education.

### Background and Diagnosis

It is not easy to pinpoint a single factor that made Jacob's search unsuccessful. Based on his determined attitude and his willingness to narrow and broaden his search criteria, I predicted that he would eventually meet with success. However, Jacob also lacked professional guidance, was new to the experience of searching for a professional position, and did not seem to be aware of strategies other than his favored word-of-mouth approach. At times he expressed deep uncertainty, and this, coupled with the fact that he was not getting any truly good matches for his search criteria, even after changing it, led me to believe that he failed due to an inability to advance beyond the Exploration phase of Khulthau's ISP. As time went on, not only did Jacob's self-imposed time pressure increase, but he also became increasingly less certain about his results. Thus, we might conjecture that Jacob's affective load increased to levels that were higher than he could withstand (Nahl, 2003, p.41).

Because Jacob's primary search strategy was word-of-mouth, his search was heavily affected by his culture, his perception of his social role, and by the influence of his family. Jacob is the youngest child in his family and has lived his entire life in the Portland area. His orientation towards environmental activism and holistic thinking can be linked to his admiration for his father, a lifelong Sierra Club member, and also to growing up in the Northwest. Although Jacob is a white male from a middle-income family, it would be a mistake to think that those attributes primarily define his culture. Despite the fact that he refused to take a personality test, his non-Western, unconventional thinking pattern is clear. According to J.A. Anderson's description (as cited in Thomas, 2004), a Western worldview (which typically covers Anglo-Europeans such as Jacob) is analytical, views time as fixed, and values task orientation and limited emotional expression (p. 79). However, instead of perceiving himself primarily as a white male, Jacob chooses to identify himself with GLBT (gay, lesbian, bi, and transgender), punk, and other alternative subcultures. Recently he cut his hair in a Mohawk and purchased a leather jacket, which he proudly showed me. His relationship with time and deadlines shifted based on his feelings at the moment; he tended to value strong interpersonal relationships, and preferred contributions to society at large over individual achievement.

Some factors that may have affected the outcome of Jacob's job search include: his low experience level, his moderate level of familiarity with the search tools available to him, and personal barriers such as transportation requirements and lack of training in a field that frequently requires years of experience and many different specialized skills. Finally, Jacob's emotional state and his attitude towards his search must also be taken into account. In the past, Jacob found work through his newspaper's classified ads. However, formerly, he was not looking for a specialized position. He has no previous experience with preparing a professional resume or obtaining skilled work. In addition, although he regularly performs successful Internet searches for personal use (looking up movie trivia, unknown words etc.), he did not, for instance, try posting his resume online or

performing any general search engine searches. Overall, on a scale of 1-10, he would rate his ability to search for information about jobs a 6.5, mainly because he is aware that there are probably relevant websites that he does not know about. Jacob is aware of Boolean search terminology and uses interlibrary loan services and databases academically, but has not applied any of these tools to his job search. He also expressed confusion and uncertainty when asked if he had consulted a job placement service such as the state employment department. This is consistent with Belkin's (as cited in Thomas, 2004) description of a beginning searcher who can be in an anomalous state of mind, and clearly experiences the gap between what he or she knows and what he or she desires to know (p. 65).

At the outset of his search, Jacob was very upbeat and was sure that he would succeed. He knew of an opening at ODOT that he thought might be offered to him after his internship ended. However, the offer did not materialize. Then, after the three month mark passed, Jacob began to become discouraged. He continued to believe he would find a job that would match his requirements, but only because he had drastically lowered his standards. Several jobs opened up outside of the Portland area (in Eastern Oregon and in Idaho), but he wasn't prepared to move to places without mass transportation systems. At this point, he landed his first interview out in Salem, which was farther away than he wanted to go, but when it too turned out to be a dead end, he began to feel "really desperate." It was at this time that he also told me, "There haven't been many encouraging things lately; there are jobs opening up, but not in environmental science."

## Discussion and Conclusion

Before analyzing the results of this case study, we should understand the nature of job hunting, especially job hunting on the Internet. As Jacob discovered, there is a vast difference in the quality of different online search tools. For instance, he assumed that the Internet version of the Oregonian would be easier to search than the paper, but quickly stopped using Oregonlive.com because of its "wacked out engine." Another site, Craigslist.com, yielded good results, but listed all nonprofit jobs together and arranged them according to their date of posting, which made it difficult to search. Jacob claimed that he did not experience information overload because he found so few appropriate hits – only one or two for every three to six hours of searching. However, he did become tired of the exhaustive routine of sifting through the different job sites over and over again, looking for recent updates or for slightly different job ads.

It is not surprising that Jacob chose to do most of his job searching online. According to Boyce and Rainie of the Pew Internet and American Life Project (2002), half of all Internet users have looked for jobs online. Those most likely to search for jobs online are between the ages of 18-29, men, persons who are unemployed or in sales jobs, the highly educated, and Hispanics and African Americans (p.1-2). Researchers Jansen, Jansen & Spink (2005) found that even though, "the web has dramatically changed the way job seekers find positions," little research has been done about the actual habits of job searchers on the Internet. They state that there is "an implicit assumption . . . that active job seekers can readily find job postings and applications on corporate web sites" (para.1-

5). This means that even corporate recruiters and job boards, who have a vested interest in attracting searchers, are little more than guessing about how to best reach them.

For the job searcher, the job hunt does not end once relevant information has been found. A job hunt is unlike a hunt for a product or a piece of information. If a searcher finds an ad that advertises for a desired job, he or she cannot simply go out and “get it.” The employer must also decide that the applicant is a good match for their search criteria. Because of this unique search complication, author Joan Durrance (1993) explains, “In order to make good decisions about what actions to take, people need a realistic understanding of their own job-related skills, interests, talents, likes and dislikes, as well as information about current job and career requirements” (p.23).

Throughout his search process, Jacob’s cognitive and affective responses closely mirrored the responses of students in Khulthau’s ISP model (Thomas, 2004, 31). When Jacob’s job search was initiated by the end of his internship, he began with a high level of ambiguity and uncertainty. As his search progressed and he moved into the Selection stage, he began to feel surer about his task and increasingly optimistic about his chances for success. However, when he reached the Exploration phase, he became stuck in the Danger Zone of confusion, frustration and doubt. He then returned to the Selection stage to re-define his goals, but unfortunately became stuck again as soon as he re-entered the Exploration phase. Emotions that made Jacob feel like quitting were his frustration at having little experience in his chosen field and his irritation at not finding anything that matched his search criteria.

Search expert Brian Quinn (2003) cites affective problems such as arousal, motivation, attention, self-confidence and self-efficacy as interfering with the search process (p.142-149). Ideally, a professional information worker or certified career counselor would be able to help reduce Jacob’s stress reactions and alter his negative emotions and beliefs (p. 150). Khulthau (1999) suggests that familiarizing discouraged searchers with the various Danger Zones of the ISP and then assuring them that their feelings are normal is an encouraging and useful tactic (p. 12-16). However, after Jacob reviewed Khulthau’s model he said it was not helpful because, “I already knew that. My aunts always tell me how hard it was for them to get work and I don’t need to hear about how everyone else has it bad. I need to tell you how I have it bad so you can help me find a job!” Although many of Khulthau’s remediation strategies only apply to students, other strategies exist for helping searchers who are having affective difficulties. An information professional might convince the searcher to assess and validate his or her abilities in order to make a successful search match. In order to alleviate the false impression that he is in a competition with his friends and family members, the professional could teach Jacob not to make comparisons between their searches and his own (Quinn, 2003, 150).

According to Cognitive Psychology expert, Albert Bandura (1994), a lack of self-esteem alone will not sabotage a person’s efforts to succeed, however a lack of self-efficacy, the belief in one’s ability, will. That is, if the searcher’s actual ability and their chosen task are similar, and that person possesses high self-efficacy, then he or she should succeed (p.71-81). While Jacob rated his search ability as a 6.5 (on a scale of 1-10, 10 being

highest), he rated his chances for success a 9. It is possible that his ability was not well matched with his task. Unfortunately, in that case, positive thinking would not have made a large difference in his performance outcome.

In our exit interview, I asked my subject what his perfect job resource would have been. He mentioned that after his internship he would have liked following-up with a career counselor. However, he believed that the career counselor available through his university was too busy to talk with him based on his observation that she would only schedule an appointment weeks in advance. This is an unfortunate because according to Durrance (1993), in her book, *Serving Job Seekers and Career Changers: A Planning Manual, for Public Libraries*, searchers like Jacob who are uncertain about their needs and abilities are often self-conscious and can easily be too intimidated to seek the help they require. A service to help people assess their skills and options, such as a library Education, Job and Career Information Center, might have been exactly what he needed (p.22). Jacob also might have benefited from a book or job course that would present him with alternative search strategies, so that when his chosen strategy failed he would still have options. Given the specialized knowledge necessary to independently evaluate various job search strategies for finding environmental positions in the Portland metro area, it is not feasible given scope of this study to create a full treatment and evaluation plan as suggested by Grover's "Model for Diagnosing Information Needs." Although Khulthau's research does not present us with the perfect model looking at Jacob's case, it is clear that his emotions affect the decisions that he makes throughout his search process. It is likely that by managing his affective load with professional assistance tailored to his information needs and search habits, it would be possible to advance Jacob's search process.

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## Appendix

### Interview #1:

- Please tell me a little bit about yourself: how old you are, your education, personal background etc.
- As you may already know, there are many different learning styles. Would you consider yourself more of a visual, auditory, kinesthetic or tactile learner?
- Do you frequently use the Internet for personal searches? If so, please briefly describe a successful search that you have recently performed.
- Do you ever use Boolean search terms, databases, or interlibrary loan services for personal, academic or business use?
- I heard that you are in the middle of a job search. Please tell more about this situation.
- Have you done a search like this before? If so, has that experience influenced your current search in any way?
- What are your current search criteria?
- Has this criteria changed over the course of your search?
- How would you rate your ability to search for information about this topic?
- How successful do you anticipate you will be in your search?
- What methods do you use to locate information about your search topic?
- Who have you talked to or listened to so far?
- What led you to choose these sources?
- What did you find out from these sources?
- Was this information helpful? If so, how? If not, please explain.

### Interview #2:

- Would you prefer to find one source that mostly answers your question or would you prefer to have many sources that, when added together completely answer your question?
- How much time do you have to perform this search? When would you prefer to finish and what are the any consequences for not completing this search on time?
- When you are searching for information, do you prefer to find sources with lots of interesting and important details or sources that give a clear overview of the topic that puts it in perspective?
- Are there any times when you have experienced irritation, frustration, anxiety or rage because of your search?
- Please tell me more about these times.
- Before beginning your search, what expectations did you have about your search?
- What are your expectations now?
- What barriers to gathering information did you discover? How do you respond to barriers in searching?
- Say you are not finding what you are looking for. Would you continue to use the same search strategy but look harder?
- At what point do you try a new strategy?
- Do you usually prefer using many search strategies all at once or do you try one strategy at a time?

- What things make you feel encouraged about your search, as if you are on the right path?
- What things do you find discouraging, that make you want to quit?
- According to Carol Khulthau, there are many stages of the information search process. Each stage is associated with an emotion such as anxiety, optimism, or confusion. Even the most exceptional students and researchers at some point in their search must overcome a dip in confidence and task clarity. Would knowing this process help you feel more encouraged about your own search?
- Are there any environmental barriers that you face when gathering information? What do you think could be done to help eliminate these problems?
- Do you ever experience finding too little or too much information? How do you feel when this happens and what do you typically do?
- What type of information do you think would most help you proceed with your search at this time and how would you use it?
- Is there anything that you feel you do not know about your search?
- If you could have exactly the help that you wanted, what would it be?

Interview #3:

- How is your search going now?
- What made you decide to give up?
- What help would you have liked to receive that you did not receive?
- How do you feel about your decision?
- What plans do you have for the future?
- Is there anything that will cause you to begin searching for a job again?
- Have you tried searching in a general search engine?
- How many hours a week did you devote to your job search?
- Did this amount of time change over the course of your search?
- Have you looked at any books or other job advice resources such as PSU's Online career center?