Teaching Information Behavior with the Information Horizon Interview

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Students in the Library and Information Science concentration at the Faculty of Information, University of Toronto, are being taught the Information Horizon Interview (IHI). By learning this technique, students are able to conduct original information behavior research upon a topic or population of their choice. This article provides a succinct overview of the IHI. It then reports on an IHI assignment and learning experience with enough detail and resources to enable turnkey adoption by other LIS educators.

Keywords: information behavior, information horizon, pedagogy, semi-structured interview, visual methods

In 2017, the Library and Information Science (LIS) curriculum at the Faculty of Information, University of Toronto was redesigned. As a result of this process, we introduced four new required first-year courses. One of these new courses, "The Information Experience" (syllabus available online), covers fundamentals of information behavior in contexts of relevance to information institutions and beyond.

The designer of the course, Dr. Jenna Hartel, believes that students at the master's level can successfully implement small-scale original research projects (Hartel, 2014). Indeed, she has seen them express more enthusiasm for original research than for traditional assignments centered upon scholarly or professional literature. Hence, the major assignment undertaken in "The Information Experience" was to design and conduct an original information behavior study using the Information Horizon Interview (Sonnenwald, 2005; Sonnenwald, Wildemuth, & Harmon, 2001). Students work independently on a topic and non-vulnerable population of their choice.

To relieve any anxiety about conducting original research during their first semester at an iSchool, students learn about exploratory research (Stebbins, 2001). This is the ideal approach to take when little is known about a topic but a researcher believes there are elements worth discovering. Because exploration is largely inductive, a hypothesis related

to information behavior is unnecessary at the beginning of the project. Instead, exploration aims to reveal the five "Ws": Who? What? When? Where? and hoW? It is, therefore, a descriptive process, as "the first task when studying a new phenomenon is to *describe* that phenomenon. It is difficult to think about something if you know very little about it" (Bates, 2005, p. 3). Metaphorically speaking, at the start of the semester, students put on their explorer's hats and began the assignment.

The Information Horizon Interview

The Information Horizon Interview (IHI) was introduced by Diane Sonnenwald in an article that won the 2001 ALISE Methodology Paper Award (it should be noted, however, that although Sonnenwald is credited individually as the originator of the IHI, it was developed with collaborators over the years). The IHI grew out of Sonnenwald's theoretical framework of information behavior (Sonnenwald, 1999; Sonnenwald & Iivonen, 1999), which holds that within any context or situation, individuals perceive an information horizon in which they can act and where information activity takes place. An information horizon contains documents, information retrieval tools, social networks, experimentation, observation, and many other information resources and behaviors employed during the information-seeking process.

Sonnenwald discovered that in an information-seeking situation, people can articulate their information horizon in words when they are interviewed and can also draw it on paper. Once described and illustrated by an informant, the information horizon "map" makes information behavior appear more concrete and the drawing can be used to extract additional details from the respondent. Technically speaking, the IHI consists of a semi-structured interview (Spradley, 1979) followed by diagrammatic elicitation (Copeland & Agosto, 2012; Umoquit, Tso, Varga-Atkins, O'Brien, & Wheeldon, 2013). In her landmark paper, Sonnenwald demonstrated how the textual and visual data can be analyzed both quantitatively, to identify the prevalence of information resources and behaviors, and qualitatively through social network analysis, to reveal social information resources. Findings from an IHI study may contribute to understanding information behavior and have practical applications for the betterment of information services, resources, or systems.

Since its inception almost two decades ago, the IHI has captured the imagination of information behavior scholars, who have tried their own creative reformulations. For example, Savolainen and Kari (2004) and Savolainen (2008) had informants draw an information source horizon that placed greater emphasis on the relevance and ordering of the information resources that were used. Huvila (2009) advanced the notion of an analytical information horizon map that captures the information practices of a collective (rather than an individual) and is drawn by the researcher (not the informant). For a side-by-side comparison and critique of the

different IHI-based approaches by Sonnenwald, Savolainen, and Huvila, see Hartel (2017).

The IHI was deemed an ideal method for first-year students of LIS to experience information behavior research, because it was designed to study information behavior and requires no further adaptation; is native to LIS, rather than imported from another discipline; has a detailed methods statement and is relatively easy to learn; works with small sample sizes; is low cost in terms of time and materials; has been tested by other IB researchers; exemplifies emergent visual methods (Hartel & Thomson, 2011; Prosser & Loxley, 2008); and can manifest in practical applications for information institutions.

The assignment

The IHI assignment comprised 75% of a student's grade in "The Information Experience." It consisted of three concatenated elements spread across the semester: (1) a worksheet entitled *Exploring Your Topic and Population in the LIS Literature*; (2) the original research project using the IHI upon three informants and written up as a final report; and (3) a summary presentation done in collaboration with a "cluster" (described shortly).

Some newcomers to LIS have no prior knowledge of information behavior nor much, if any, experience in empirical, social scientific research. Hence, structures were put into place to help students ascend a steep learning curve. A detailed handout (available online) outlined the key steps of the assignment; six one-hour-long, in-class workshops provided a supportive setting for hands-on practice of key tasks in the research process; and two dedicated doctoral-level teaching assistants (Christie Oh and Anh Thu Nguyen) were available for consultation via email or in person.

As background for the assignment, required readings and class lectures surveyed major concepts and theories of information behavior. Students learned berrypicking (Bates, 1989), the information search process (Kuhlthau, 1988), sense-making (Dervin & Dewdney, 1986), small worlds theory (Chatman, 1996), information encountering (Erdelez, 1999), information grounds (Pettigrew, 1999), and "finding without seeking" (Ross, 1999). To illustrate how practicing librarians can conduct original research, they read and discussed a book-length ethnographic study of undergraduate information behavior (Foster & Gibbons, 2007). These foundations provided inspiration and ways to conceptualize information behavior and its associated research methods.

At the start of the term, each student had to choose a topic and population to study. To that end, they were first asked to commit to one of seven broad domains in information behavior scholarship, coined for the purposes of the assignment as a "cluster." Selected by the instructor for their prevalence or importance in the IB literature, the clusters were academia, everyday life, the family, health, leisure, the pleasurable and the

profound (Kari & Hartel, 2007), and work. Students joined a cluster based upon their interest and then were further divided into teams of four to five individuals that became a peer-to-peer support community. The cluster-based teams would reconvene near the end of the semester to present summary discoveries to the class.

Next, students focused their interest from a broad cluster to a narrower information behavior topic and population, assisted by examples on the assignment handout and in lectures and class discussions. For example, a student who joined the family cluster studied information behavior associated with breastfeeding, while a student in the work cluster explored the information behavior of amateur stand-up comedians (see Table 1).

Table 1: A sample of student choices for cluster, research population, and research question.[a]

Cluster	Research Population	Research Question
Academia	History professors	*What are the information behaviors of history professors involved with designing a graduate course readings list?*
Everyday life	Young adults looking to apply for a new credit card	*Which information sources do consumers prioritize when choosing which credit cards to apply for? Why?*
Family	Breastfeeding mothers	*What information resources are used by millennial mothers in learning how to breastfeed a newborn?*
Health	Young women between the ages of 24–31	*What information sources do young women consult when choosing their menstrual aids?*
Leisure	Backyard chicken hobbyists	*What are the information behaviors of people who raise chickens as a hobby?*
Pleasurable and the profound	Members of the LGBTQ community in a long-term, monogamous, queer relationship between the ages of 23 and 33	*What are the information seeking behaviors associated with the decision to marry among the LGBTQ community?*
Work	Stand-up comedians	*What are the information-seeking behaviors of stand-up comedians?*

[a]Student work is shared here with permission.

To simplify the difficult step of articulating a guiding research question that aligns with the strengths of the IHI method, students were steered toward one of four questioning strategies (by replacing the "*x*" with their topic and population):

1. What information resources are used in *x*?
2. What information behaviors occur in *x*?
3. What are the characteristics of the information environment in *x*?
4. What is the nature of information in *x*?

Students were also taught how to use a sensitizing concept, which refers to a background idea that helps shape the research problem and study design (Bowen, 2006). As Blumer (1954, p. 7) explains, "definitive concepts provide prescriptions of what to see, [whereas] sensitizing concepts merely suggest directions along which to look." However, since the ideas that emerge from novice researchers are often too ambitious or sprawling, the notion of a "cutting point" was introduced. For example, a study about the information seeking associated with building a professional wardrobe would focus on bricks-and-mortar shopping venues and "cut" out the domain of online clothes shopping. No definitions or boundaries were put upon concepts like information resource or information activity, nor upon information itself, to allow unconventional information phenomena to come into view.

With a topic, population, and research question in mind, students tackled the first of three graded elements of the assignment, a worksheet entitled *Exploring Your Topic and Population in the LIS Literature* (worksheet available online). The goals of the worksheet were to provide background for the subsequent original research component, increase intimacy with the LIS literature, and become better information searchers. The worksheet posed eight questions about their topic and population that had to be answered by navigating the information behavior literature. A recurring problem at this point was that many students could not find published precedents related to their project, so a teaching assistant helped with search strategy, suggested broader conceptualizations, or pointed to resources in neighboring disciplines. Later in the semester, students repurposed the worksheet as the basis for the literature review in their final report.

As the semester entered its middle weeks, IHI research skills were taught in hands-on workshops that occupied the last hour of a three-hour class. In one workshop, students designed a semi-structured interview guide (Spradley, 1979) and then conducted a mock-interview that included the IHI's signature diagrammatic elicitation. Importantly, crucial components of the ethical protocol were embedded in the mock interview, namely, informed consent, right to withdraw, and respect for an informant's privacy. Another workshop was dedicated to textual and visual analysis, and students practiced simplified versions of content analysis,

conceptual analysis, inductive thematic analysis, and a narrative form of synthesis upon textual and visual IHI data. The workshops were scheduled in a "just-in-time" fashion so that skills learned in the classroom were immediately applied in the real research projects that were unfolding outside of class hours.

Each student conducted three IHI interviews with informants from their target population and then applied an analytical strategy of their choice to generate results. Most students selected one of the four analytical techniques taught and practiced in the workshop. Findings were communicated in written form with the help of a final report *template* (template available online) that outlined the suggested content and word counts for the essential sections of an empirical paper. The final report was allowed a maximum of 2,500 words and required these sections: title, author affiliation, abstract, introduction, literature review, research methods, findings, discussion, methodological reflections, conclusion, author bio, and appendices containing the interview guide, a page of interview transcript, and any other relevant material.

The template-based final reports resembled empirical research by "real" scholars. Myriad discoveries were documented, and most pertained to contexts that had never before been studied for their information phenomena. It is impossible to summarize results from such wide-ranging research, but highlights include the importance of social information resources, the prevalence of embodied information practices, and the impact of the affective dimension on information behavior. Based on their experience, students were eager to express methodological shortcomings and refinements to the IHI. For instance, one identified a need for a more critical version of the technique that captured social, cultural, or economic impacts upon information phenomena; another proposed a way to implement the technique upon two informants simultaneously, therefore focusing the IHI upon microsocial information dynamics. Highlights from three exemplar studies are showcased below, and more fulsome displays of the outcomes are available at an online gallery (gallery available online).

You are how you cook: Embodied cognition and inter-generational transmission of food preparation skills

Conducted as a case study, Virginia De Witt's project examined the information-seeking behavior associated with the inter-generational transfer of food preparation skills in a single nuclear family unit (see Figure 1). The study was also designed to interrogate and explore whether the family, as an arguably unique social entity, could be considered an information ground (Fisher, 2005) that needed to be better understood. De Witt further focused her research by employing embodied cognition (Barsalou, 2008; Niedenthal, 2007; Singer & Goldin-Meadow, 2005) as a sensitizing concept "aimed at highlighting the unique role non-verbal information transfer can play within the family." She used an inductive approach to

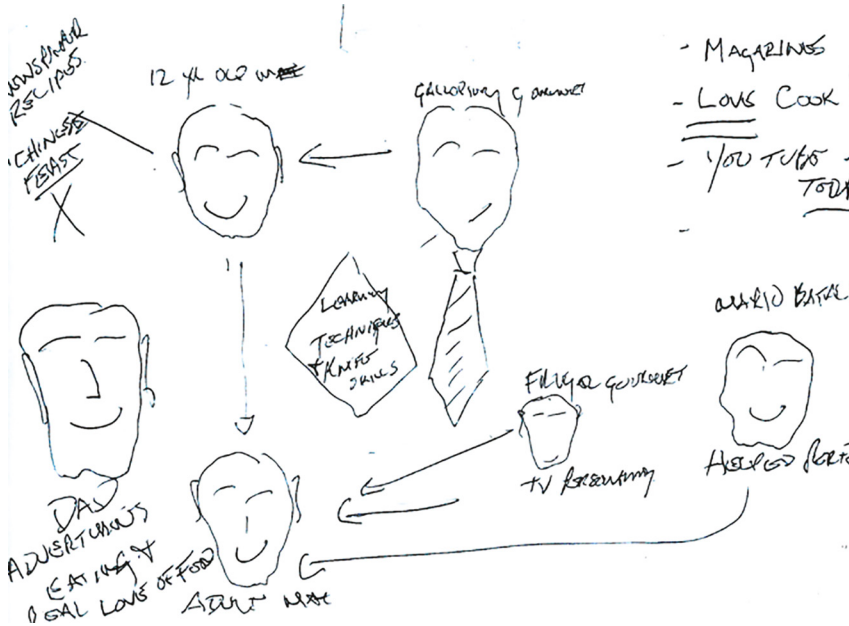

Figure 1: Example Information Horizon Map from research by Virginia De Witt.

identify major themes in the data, such as the importance of parental enthusiasm for cooking and the transfer of knowledge and skill in food preparation, as children bonded with parents over food. Furthermore, she ascertained that embodied emotion, especially empathy, played a role in reinforcing verbal instructions, which ensured the successful transfer of knowledge and skill into the child's mind. Finally, De Witt also detected the "significance of combining language and gesture in the transferring of basic mixing skills." While drawing on Erdelez's (1999) concept of "information encountering" to interpret and explain her findings, she eloquently argued that the family unit is indeed a viable information ground that is worthy of further study.

The information behaviors of novice tarot card readers

Through an exploratory study seeking to answer the question "What are the information behaviors of individuals new to the practice of tarot card reading?," Alice Norton-Bell contributed to the limited research in LIS on the information behavior and practices of those engaged in activities related to the spiritual, supernatural, or paranormal (see Figure 2). Using inductive thematic analysis, she found that while her informants used a variety of information resources, they gravitated toward print sources as they all ascribed a greater sense of authority to print sources over digital ones. She also determined that there was a distinction between the information behavior exhibited before and/or after a tarot reading versus

Figure 2: Example Information Horizon Map from research by Alice Norton-Bell.

during a reading. And finally, she discovered something seldom seen in information behavior research, namely that the ultimate informational goal of this population was to become expert and skilled enough to be able to consciously distance themselves from information resources. Norton-Bell went on to discuss and interpret her findings through the lens of Erdelez's (1999) concept of information encountering and concluded with a recommendation for further research.

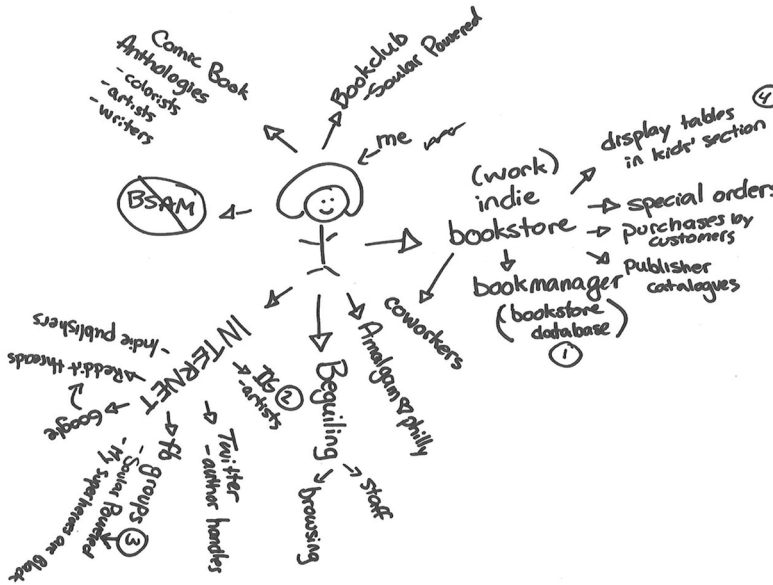

Figure 3: Example Information Horizon Map from research by Kimberly Trusty.

Alone together: The information-seeking behaviors of adult readers of superhero/costume comic books

Focusing on adult readers of superhero/costume comic books, a group that has been overlooked "both as research subjects and users of library systems/collections," Kimberly Trusty set out to discover "what information resources do adult readers of comic books use?" (see Figure 3). Using a narrative analysis and inductive approach to interpret her data, Trusty found "evidence of information encountering (Erdelez, 1999) and finding without seeking (Ross, 1999)" in the different approaches taken to find information about comic books. In her study, some patterns emerged to suggest that age and gender might have an impact on the information-seeking behavior among members of this population. Trusty, however, argued that the sample size was too small to draw definitive conclusions and therefore further research was needed. Aware that her study has implications for LIS professionals, Trusty also artfully wove together some of her findings and conclusions with recommendations for ways to improve services to comic-book readers in libraries.

The summary presentation

The third element of the assignment was a 15-minute summary presentation done at the higher conceptual scope of the cluster team. This required students to step back from their individual project to consider if their research had implications for other populations. Each cluster team considered whether favored information resources or behaviors existed

across the cluster or whether the IHI technique performed similarly among all populations within the cluster. While developing the presentations collaboratively, individuals had an opportunity to champion their own research and compare it with work done by peers, a valuable professional skill.

In the final workshop, students were taught communication skills for their presentation. They were encouraged to take creative risks and to make their presentations academically sound, yet also provocative and entertaining. As a result, one cluster team used the Toronto subway system as an organizing motif and each station (e.g., "Methodology Square") marked a different topic; another team gave out "I ♥ the IHI" souvenir buttons. The last meeting of the class was enlivened by many dynamic presentations and celebratory refreshments.

Based on experience, the following tips can help other educators avoid pitfalls or improve upon the IHI assignment. To start, students may need guidance to discern the difference between "life activities" and "information activities," a distinction well made by Hektor (2001) and a hallmark of information research; put differently, it takes some time and assistance for novices to detect "the red thread of information in the social texture of people's lives" (Bates, 1999, p. 1048). If informants prove hard to find, students might also require assistance in imagining a higher scope for their study. We wish to stress the importance of the hands-on workshops, which gave newcomers to social scientific research time to practice and a boost in confidence. Finally, in our next offering of this assignment, we will focus more attention on the applications of the original research to information institutions.

Student perspective

In our experience, students were generally receptive to using Sonnenwald's Information Horizon Interview to learn about information behavior, with one student commenting that the method is "fun, engaging (for both the participants and myself)." Another student mentioned that the "IHI is very useful for addressing numerous ethnographic questions," while their classmate added that it "unlocked ideas/memories that had either been long buried or considered irrelevant by participants." However, as all methods have their disadvantages, so too did the IHI. One student stated that "the IHI was a double-edged sword. It both added NEW information for some of my participants, but for others it contradicted what they were verbally telling me. (For example, saying they specifically do not use a certain resource, yet adding it into the IHI)." Similarly, another student described it as a "hit-or-miss format." Despite some of these challenges, great enthusiasm was expressed for the IHI. One student conveyed that "the IHI method was easy to follow and provided enough structure so that I didn't feel lost, but allowed me to tailor my questions and queries to best suit my topic," thus echoing another student who said they "would

definitely consider using the IHI in the future," adding, "I think participants like having something to do beside speak. It puts them at ease and the talking/doing seemed to net much more information than one or the other method would on its own. Sonnenwald's research is invaluable!"

Conclusion

At the end of the semester, students of "The Information Experience" were exposed to the concept of concatenation, which refers to a series of interconnected events. In this research context, concatenation suggests that the IHI assignment can be the first of many small-scale studies that are thematically linked together like a chain (Stebbins, 2001). To this end, students were invited to envision how their IHI research project could be a springboard to another inquiry, followed by another and another. One enthusiastic learner imagined her recent IHI study of the information behavior of women with diabetes leading to future forays into a series of women's health-related topics.

The current information environment generates the illusion that people have no difficulty in meeting their information needs. To the contrary, Wellstead (2010) convincingly argues that many information needs are unmet, leaving citizens ill-equipped to contribute productively to society and to solve problems related to relationship, life-threatening illness, addiction, and parenting. Further, Wellstead suggests that more can be done by LIS educators to help students and practitioners of LIS to understand the everyday use of information, with the goal of designing better information products. Teaching information behavior and the IHI research method to the next generation of LIS professionals is one positive step toward improved information provision across society.

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References

Barsalou, L.W. (2008). Grounded cognition. *Annual Review of Psychology, 59*(1), 617–645. https://doi.org/10.1146/annurev.psych.59.103006.093639

Bates, M.J. (1989). The design of browsing and berrypicking techniques for the online search interface. *Online Review, 13*(5), 407–424. https://doi.org/10.1108/eb024320

Bates, M.J. (1999). The invisible substrate of information science. *Journal of the American Society for Information Science,* 50(12), 1043–1050.

Bates, M.J. (2005). An introduction to metatheories, theories, and models. In K. Fisher, S. Erdelez, & L. McKechnie (Eds.), *Theories of information behavior: A researcher's guide* (pp. 1–24). Medford, NJ: Information Today.

Blumer, H. (1954). What is wrong with social theory? *American Sociological Review*, *19*(1), 3–10. https://doi.org/10.2307/2088165
Bowen, G.A. (2006). Grounded theory and sensitizing concepts. *International Journal of Qualitative Methods*, *5*(3), 12–23. https://doi.org/10.1177/160940690600500304
Chatman, E.A. (1996). The impoverished life-world of outsiders. *Journal of the American Society for Information Science*, *47*(3), 193–206. https://doi.org/10.1002/(SICI)1097-4571(199603)47:3<193::AID-ASI3>3.0.CO;2-T
Copeland, A.J., & Agosto, D.E. (2012). Diagrams and relational maps: The use of graphic elicitation techniques with interviewing for data collection, analysis, and display. *International Journal of Qualitative Methods*, *11*(5), 513–533. https://doi.org/10.1177/160940691201100501
Dervin, B., & Dewdney, P. (1986). Neutral questioning: A new approach to the reference interview. *RQ, 25*(4), 506–513. Retrieved from http://www.jstor.org/stable/25827718
Erdelez, S. (1999). Information encountering: It's more than just bumping into information. *American Society for Information Science and Technology*, *25*(3), 26–29. https://doi.org/10.1002/bult.118
Fisher, K. (2005). Information ground. In K. Fisher, S. Erdelez, & L. McKechnie (Eds.), *Theories of information behavior: A researcher's guide* (pp. 185–190). Medford, NJ: Information Today.
Foster, N.F., & Gibbons, S. (2007). *Studying students: The undergraduate research project at the University of Rochester*. Chicago, IL: Association of College and Research Libraries.
Hartel, J. (2014). Drawing information in the classroom. *Journal of Education for Library and Information Science*, *55*(1), 83–85.
Hartel, J. (2017, June). *Information behavior, visual research, and the information horizon interview: Three ways*. Paper presented at Conceptions of Library and Information Science, Upsalla, Sweden. Retrieved from http://www.webcitation.org/6oJglm19p
Hartel, J., & Thomson, L. (2011). Visual approaches and photography for the study of immediate information space. *Journal of the American Society for Information Science and Technology*, *62*(11), 2214–2224. https://doi.org/10.1002/asi.21618
Hektor, A. (2001). *What's the use?: Internet and information behavior in everyday life*. Linköping, Sweden: Linköping University.
Huvila, I. (2009). Analytical information horizon maps. *Library & Information Science Research*, *31*(1), 18–28. https://doi.org/10.1016/j.lisr.2008.06.005
Kari, J., & Hartel, J. (2007). Information and higher things in life: Addressing the pleasurable and the profound in information science. *Journal of the American Society for Information Science and Technology*, *58*(8), 1131–1147. https://doi.org/10.1002/asi.20585
Kuhlthau, C.C. (1988). Developing a model of the library search process: Cognitive and affective aspects. *Reference Quarterly, 28*(2), 232–242. http://www.jstor.org/stable/25828262
Niedenthal, P.M. (2007). Embodying emotion. *Science*, *316*(5827), 1002–1005. https://doi.org/10.1126/science.1136930
Pettigrew, K.E. (1999). Waiting for chiropody: Contextual results from an ethnographic study of the information behavior among attendees at community clinics. *Information Processing & Management*, *35*(6), 801–817. https://doi.org/10.1016/S0306-4573(99)00027-8
Prosser, J., & Loxley, A. (2008). *Introducing visual methods*. NCRM Review Papers NCRM/10. Southampton, England: National Centre for Research Methods. Retrieved from http://eprints.ncrm.ac.uk/420/1/MethodsReviewPaperNCRM-010.pdf
Ross, C.S. (1999). Finding without seeking: The information encounter in the context of reading for pleasure. *Information Processing & Management*, *35*(6), 783–799. https://doi.org/10.1016/S0306-4573(99)00026-6
Savolainen, R. (2008). *Everyday information practices: A social phenomenological perspective*. Lanham, MD: Scarecrow Press.

Savolainen, R., & Kari, J. (2004). Placing the Internet in information source horizons: A study of information seeking by Internet users in the context of self-development. *Library & Information Science Research, 26*(4), 415–433. https://doi.org/10.1016/j.lisr.2004.04.004

Singer, M.A., & Goldin-Meadow, S. (2005). Children learn when their teachers' gestures and speech differ. *Psychological Science, 16*(2), 85–89. https://doi.org/10.1111/j.0956-7976.2005.00786.x

Sonnenwald, D.H. (1999). Evolving perspectives of human information behavior: Contexts, situations, social networks and information horizons. In T.D. Wilson & D.K. Allen (Eds.), *Exploring the contexts of information behavior: Proceedings of the second international conference in information needs, seeking and use in different contexts* (pp. 176–190). London, England: Taylor Graham.

Sonnenwald, D.H. (2005). Information horizons. In K. Fisher, S. Erdelez, & L. McKechnie (Eds.), *Theories of information behavior: A researcher's guide* (pp. 191–197). Medford, NJ: Information Today.

Sonnenwald, D.H., & Iivonen, M. (1999). An integrated human information behavior research framework for information studies. *Library & Information Science Research, 21*(4), 429–457. https://doi.org/10.1016/S0740-8188(99)00023-7

Sonnenwald, D.H., Wildemuth, B.M., & Harmon, G.L. (2001). A research method to investigate information seeking using the concept of information horizons: An example from a study of lower socio-economic students' information seeking behavior. *The New Review of Information Behavior Research, 2*, 65–86. http://hdl.handle.net/10760/7969

Spradley, J.P. (1979). *The ethnographic interview*. New York, NY: Holt, Rinehart and Winston.

Stebbins, R.A. (2001). *Exploratory research in the social sciences*. Thousand Oaks, CA: SAGE Publications. https://doi.org/10.4135/9781412984249

Umoquit, M., Tso, P., Varga-Atkins, T., O'Brien, M., & Wheeldon, J. (2013). Diagrammatic elicitation: Defining the use of diagrams in data collection. *The Qualitative Report, 18*(30), 1–12. http://nsuworks.nova.edu/tqr/vol18/iss30/2

Wellstead, P. (2010). Delivery of everyday life information: opportunities and challenges for the library and information profession in Australia. *Australian Library Journal, 59*(3), 95–107. Retrieved from http://www.tandfonline.com/doi/pdf/10.1080/00049670.2010.10735995. https://doi.org/10.1080/00049670.2010.10735995