B Evidence Based Library and Information Practice

Evidence Summary

High School Students Struggle to Find School-Related Information on the Web

A Review of:

Shenton, Andrew K. "The Information-Seeking Problems of English High Schoolers Responding to Academic Information Need." <u>Library Review</u> 57.4 (2008): 276-88.

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Abstract

Objective – To investigate the informationseeking behaviour of high school students looking to meet school-related information needs.

Design – Online questionnaire.

Setting – A comprehensive, publically funded high school in north-east England.

Subjects – Seventy-seven high school students between the ages of 13 and 18 who responded to an online questionnaire that was distributed to the 900-1000 students enrolled at the institution.

Methods - An invitation to participate in an online questionnaire was sent to all students at the high school in October, 2006, via email. The total number of invitations sent was not indicated, although it is noted that current enrolment at the school is approximately 900-1000 students across years 9 to 13. In the e-mail, students were provided with a link to a questionnaire posted on the school's intranet. The questionnaire consisted of six multiplechoice and three open-ended questions. Qualitative data gathered through an openended question about problems encountered when seeking information for school was manually coded, and forms the focus of this article.

Main Results - Seventy-seven online questionnaires were completed by students between 31 October and 27 November 2006, when analysis of the data began. Of the 77 respondents, only 35 provided data on problems encountered when seeking information for their assignments. Most of the respondents in this group were in years nine, ten and eleven (ages 13-16), with only two in year 12 (16-17) and four in year 13 (17-18). Over half (19/35) of respondents were female. Forty remaining respondents either stated that they experienced no problems in finding the information they needed for school or did not answer the relevant question on the questionnaire. Two participants indicated that they did not have the information they needed to complete their schoolwork because they did not look for it.

Over 20 distinct information-seeking problems were identified through inductive analysis of the qualitative data provided by 35 participants. Difficulties encountered in the search for information largely fell into four major categories: problems determining an appropriate search strategy; barriers posed by limited school resources or Internet filtering software; "process frustrations" (280) stemming from the perceived inadequacies of search engines, poorly designed Web sites, and missing or broken Web links; and, "shortcomings in the retrieved information" (281) in terms of relevance and accuracy. In addition, a small number of students either indicated that they had difficulty applying the information they found to the problem that prompted the search, or were concerned about copyright restrictions on how they could use the information.

All but two of the problems reported by students related to information-seeking on the Web. The Web was the most popular source of information for students, with 71 out of 77 respondents listing it as one of the sources or the only source they consulted for school.

Conclusion – The results suggest a need for information literacy instruction among high school students, with a particular focus on effective use of the Web. The author suggests that some of the students' frustrations may have been due to an "overreliance" on Web resources, and could have been avoided if they were educated in the use of additional types of tools (286). This reliance on Web search engines proved problematic when Web filters impeded the students' academic research. Some of the problems reported by students in 2006 in the search for academic information were similar to those recounted by students in 1999-2000 for the author's earlier fieldwork in the same geographic area, including concerns about the accuracy or lack of detail of some Web sources, difficulties identifying effective search terms, and barriers posed by Internet filters. Additional research is needed to determine whether students experience the same difficulties when searching for information to meet personal needs and interests as they do when they are searching for information at the behest of a teacher.

Commentary

In his discussion of the practice of information-seeking behaviour research in schools, Shenton outlines some of the benefits and drawbacks of conducting fieldwork in such an environment. While schools may provide researchers with a ready-made group of young people from diverse economic and social backgrounds, they also present additional challenges, such as the red tape involved in obtaining the requisite permissions from participants and their guardians, difficulties scheduling research into an already crowded school calendar, and finding space and privacy to work with students (Shenton, "Information-Seeking Research" 180-2).

This article suggests that a school's existing research culture may also pose problems for researchers looking to connect with students. Shenton acknowledges that using an online questionnaire was not the best method for collecting qualitative data on information-seeking behaviour, but states that "the investigator had to temper his inclinations in order to conform to the expectations of the school's senior managers" (Shenton, "Information-Seeking Problems" 277). The methodology employed was dictated by past practices at the school, and its use suggests a compromise made by the researcher in order to secure access to the subject pool. The reliance on this single source of self-reported data to create a snapshot of the difficulties encountered by students is problematic, as it relies on the students' willingness to expend the time and energy to type out a considered response to an open-ended question. The use of an online questionnaire may have also lent itself to a higher response rate from students already predisposed to use the Web first when looking for information. Thirty-five students did provide valuable insight into the information-seeking process from the user's perspective, making this article of interest not only those working in secondary education but also to the academic librarians who will inherit these students down the road. However, a combination of methodologies would have provided richer data and allow the researcher probe deeper into some of the scenarios recounted in the questionnaire.

The potential strength of an online questionnaire – anonymity – was also compromised by the fact that the identity of respondents was logged by the school's computer system and made available to the researcher. Shenton suggests that some students may have lied about their experiences in order to save face, although several students' willingness to admit to research inaction suggests that not all students were concerned about the researcher's good opinion ("Information-Seeking Problems" 279). One could infer from these statements that the students were aware that their responses were being tracked by the system, but Shenton does not explicitly state that this was the case.

The number of students who completed the questionnaire is described as "disappointingly small," although the exact response rate to the questionnaire is not made available (Shenton, "Information-Seeking Problems" 279). Based on the enrolment figures provided (900-1000 students), the total response rate for the survey may have ranged from 7.7 to 8.6%. Of those who did provide data on problems encountered, most were between the ages of 13 and 16, with limited representation from upper year students. Lack of data on the number of students enrolled in each year group makes it difficult to determine if this is simply a reflection of the proportion of students registered in years 12 and 13, or if there are other factors at work (e.g. more experienced students encountering fewer difficulties, less interest in participating among older students, etc.).

Other missing figures include how many respondents did not answer the question on problems encountered and how many indicated that they did not experience any problems at all. A combined total of both incidences is provided, but it may have been illuminating to examine them individually. The voices of students who felt they had been successful in their searching are missing from this article, and may have provided interesting examples of how students define a successful search or what information literacy skills they may already possess.

The author was also interested in tracking changes in students' information-seeking behaviour over time, particularly given the increasing importance of the Web over the last decade. The links made between the findings of this study and the author's 1999/2000 fieldwork would have carried more weight if data from the same school in two different time periods was being compared, rather than data collected at different institutions in the same geographic area. This more recent project also focused on students at a single school, whereas the earlier fieldwork collected data at six different institutions, lessening the potential impact of an individual school's culture on the results collected.

Of interest to information professionals is the limited role of library resources in the students' descriptions of their informationseeking behaviour. The one student who did talk about the library's resources in geomorphology found them "restricted in depth of detail" ("Information-Seeking Problems" 281). No mention is made of students consulting with information professionals when problems were encountered. The information provided about the school library focused on its computer lab, and it is not clear if it is staffed by information professionals. It would have also been interesting to know more about the physical and electronic resources made available to students at this high school through their library. For example, does the school currently subscribe to any electronic databases? If so, could the lines between subscription and freely available Web content have been blurred in student responses? The few additional comments on resources provided by the school also talk about their inadequacy (not enough teacher-assigned texts and computers with Web filters that impeded searching). The frustrations expressed by students who felt that their work had been obstructed by Web filtering software are

particularly important, given the debate around the use of such programs.

The solution identified by Shenton for the problems encountered by the young people in this study is formalised information literacy instruction, but the limitations of the study may make it difficult for others to draw firm conclusions about what direction such instruction should take. Shenton's emphasis on improving Web searching does appear to be in keeping with the behaviour demonstrated by his respondents, although some of his additional suggestions may not prove to be as successful. Students' frustrations with the Internet in this study did not necessarily lead them to try other sources. Shenton himself highlighted this paradox in an earlier work: "Young people are often highly critical of particular information resources, yet continue to use them habitually" ("Paradoxical World" 4). One suspects that even with rigorous training in sources like paper indexes (which are also mentioned by Shenton as a possible alternative for meeting some of the information needs identified by respondents), students would still turn to the Web first for answers, not only for school, but also to meet personal needs.

It also is not clear what level of information literacy instruction the students had already received, either from information professionals working in the school or from individual teachers. How did those students who experienced successful searches come by their skills? Particularly intriguing are the three students who indicated concerns about copyright in their use of information found on the Web. Since all three students were completing the same assignment, one could speculate that the teacher of that course had addressed this issue in the classroom. The limitations of the data collection tool employed leave this and many other interesting questions about

students' information-seeking behaviour unanswered.

Works Cited

- Shenton, Andrew K. "Information-Seeking Research in Schools: Opportunities and Pitfalls." <u>Aslib Proceedings</u> 56.3 (2004): 180-86.
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