

# **Evidence Based Library and Information Practice**

## Evidence Summary

## Users Engage More with Interface than Materials at Welsh Newspapers Online Website

#### A Review of:

Gooding, P. (2016). Exploring the information behaviour of users of Welsh Newspapers Online through web log analysis. *Journal of Documentation*, 72(2), 232-246. doi:10.1108/JD-10-2014-0149

### Reviewed by:

Kathleen Reed Assessment & Data Librarian Vancouver Island University Nanaimo, British Columbia, Canada Email: kathleen.reed@viu.ca

Received: 1 June 2016 Accepted: 4 Aug. 2016

Accepted: 4 Aug. 2010

© 2016 Reed. This is an Open Access article distributed under the terms of the Creative Commons-Attribution-Noncommercial-Share Alike License 4.0 International (<a href="http://creativecommons.org/licenses/by-nc-sa/4.0/">http://creativecommons.org/licenses/by-nc-sa/4.0/</a>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly attributed, not used for commercial purposes, and, if transformed, the resulting work is redistributed under the same or similar license to this one.

#### **Abstract**

**Objective** – This study has two specific objectives: to learn about the behaviours of visitors to the Welsh Newspapers Online (WNO) website, and to explore how the identified behaviours are different from those common to information-seeking in a physical archive.

**Design** – Analysis of Google Analytics and web server content logs.

**Setting** – Welsh Newspapers Online website: <a href="http://newspapers.library.wales">http://newspapers.library.wales</a>

**Subjects** – WNO had 19,805 unique visitors from 12 March 2013 to 30 June 2013, who made 52,767 visits to the site.

Methods – Gooding accessed the WNO Google Analytics account, which provided visitor numbers, user engagement by page visit and visit duration, bounce rate, and mobile and social media usage. Using anonymized processed content logs provided by the National Library of Wales, he then explored searches undertaken by users on the website; instances where users browsed, filtered, or otherwise interacted with search results; and instances where users viewed content.

Main Results – Google Analytics statistics showed users of WNO demonstrate behaviour that is "deeper and more sustained than general web browsing" (p. 237). The number of visitors who only viewed one page and then left the site (bounce rate) was low, while page views and time spent on the site were higher

than considered standard on general websites. Mobile users made up 11% of visits, although on average they viewed fewer pages and stayed for less time than non-mobile users. Screen size was directly correlated to the level of engagement. There were 9% of visitors referred via social media, but generally showed a low engagement rate similar to that of mobile users; the exception was users who were directed to WNO via blogging platforms.

Web log analysis showed visitors most frequently accessed newspapers from the 1840s and 1850s. They viewed the title page much more frequently than any other page in the newspapers, likely reflecting that the title page is default when users access a paper via browsing. A correlation between time spent on the site and searching versus engaging with content was found: the longer a visitor was on WNO, the less time they spent searching, and the more time spent engaging with content. Still, as Gooding reports, "over half of all pageviews are dedicated to interacting with the web interface rather than the historical sources" (p. 240).

Conclusion – WNO visitors spend more of their time interacting with the site's interface than with digitized content, making it important that interface design be a high priority when designing online archives. Gooding concludes that despite a focus on interface, visitors are still engaged in a research process similar to that found in an offline archive and that "a differently remediated experience is not necessarily any less rich" (p. 242).

### Commentary

This well-written article will be of interest to library and information professionals and researchers who work in areas related to webometrics, information behaviour, electronic resources, and user experience. Although the data used is highly technical, the clearly-articulated process, results, and thoughtful conclusions are well translated for those without backgrounds in webometrics.

The evidence presented makes a compelling case that user behaviour at the WNO site is significantly different and more engaged than would be seen among users of general websites. Although this study does not test the same group of individuals in the two settings, studies of general surfing behaviour are well established in the scholarly literature and appropriately cited in this paper.

A particularly enjoyable aspect of this article is Gooding's entry into the theoretical landscape of debates related to print versus electronic texts, and the notion of readers versus users. He responds with an excellent critique of the unhelpful binary nature of these debates, concluding that people accessing online and offline archives have more in common than not.

Gooding is upfront about the limitations of his study: the data analyzed tells us how people use the site, not why; and this research is based on only one site over a period of approximately three months. Additionally, several times throughout the article Gooding refers to a rising problem for both researchers and users of websites: proprietary blackbox technologies that provide results without being transparent about either the data or algorithm used. As a researcher, he refers to Google Analytics disallowing him view of the raw data and algorithm on which he relies in this study, leaving him forced to trust the reliability and reproducibility of Google's results. From a user perspective, Gooding discusses how relying on digital archival database interfaces means placing trust in search and Optical Character Recognition algorithms. In our inability to see into the blackbox, users "place trust in algorithmic discovery, metadata production and digitization technologies to ensure the quality of the resources they discover" (p. 241).

While this particular study would be difficult to reproduce due to the proprietary nature of the data and algorithms used to analyze it, Gooding details his methodology clearly enough that it could be utilized to analyze datasets from different websites.