Demystification: how librarians can bring order to algorithmically driven transactions

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**STRUCTURED ABSTRACT**

**Aim of your contribution**

Nearly every day, news sources report examples of the effects of algorithms, whether in multiplying messages through creating a filter bubble in social media, presenting mis- and dis-information, or in detecting fraud. In this complex societal context, the question is, how should expert librarians address the issue of authority in information (Saunders and Budd, 2020). This paper takes a perspective on information literacies, and the processes that librarians use to teach students skills in identifying authoritative information in the scholarly context of a university, and recognizes that university graduates are expected to use these skills to communicate their professional knowledge inside and outside of the university.

It proposes that a shift in perception of the procedurally-based work of librarians engaged in training university students in information and digital literacies could be beneficial in demystifying the workings of algorithms, which, significantly, bring authority and order to transactions (Striphas, 2015), although they are often described as no more than a set of rules used by a computer.

**Value of your contribution**

A key value of this study is that processes and practices were described as part of the everyday work of participants in developing skills in information or digital literacies, rather than being a focus in the work of those with particular expertise or interests, or involved in a specific project. This study on digital literacies with an emphasis on algorithmic literacy employed a practice theoretical approach (Schatzki, 2012), drawing on interviews with thirty university librarians in New South Wales, Australia, and materials supporting the development of information and digital literacies in their library websites. Thematic analysis, including practice architectures, was used to examine the data. Thus, within its limitations, being based on a bounded geographical area, this study provides a candid perspective on how participants create (or do not create) a conceptual link between the work of librarians in programs of information literacy, and the possibility that their everyday activities of “sorting, classifying and hierarchizing of people, places, objects and ideas” are now sometimes being delegated to algorithms (Striphas, 2015, p. 395).

Participants described the processes they used for teaching university students how to identify and evaluate authoritative information relevant to their studies, resulting in tools that were available to students as text-based learning resources or as training videos. But at the same time, most acknowledged that their traditional claim to being the arbiters of authoritative information was being eroded. The processes for identifying and producing authoritative information within an academic context are well recognized, but the findings of this study also suggest that such processes are yet to be developed in the context of social media, which are not readily accepted as valid sources of scholarly and professional information. The well-developed processes for identifying authoritative information in an academic context and for training students to use these skills to create new knowledge in their future professions could be adapted to integrate algorithmic literacy, thus facilitating the development of skills to create new knowledge in the algorithmically driven platforms of social media.

**Implications of the study**

From this report of the study, librarians may take up the challenge to expand programs of information literacy to encompass algorithmic literacy drawing on well-established processes. Such processes have traditionally underpinned the profession of librarianship, from understanding and implementing rules of cataloguing and indexing to explaining techniques for validating authoritative sources of information. For academics in librarianship and information management, the report of this study suggests that the principles through which authoritative information is identified and new information developed are relevant in programs of education at any level: librarians in universities have a significant role to play in teaching the skills necessary for graduates to produce authoritative information in their own professional practice, thus ensuring that trustworthy information continues to be widely accessible in society.

**References**

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