## Information Literacy and Librarians' Experiences with Teaching Grey Literature to Medical Students and Healthcare Practitioners

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## Abstract

The concept of information literacy, which describes the knowledge and skills required in all contexts (i.e. educational sectors, the workplace), as well as in people's everyday lives in today's information rich society, was introduced in the United States in the early 1970s. According to the Association of College and Research Libraries Information Literacy Competency Standards for Higher Education (2000), it has been concluded that an information literate individual is able to determine the extent of information needed, access information efficiently, evaluate information and its sources critically, and use information effectively. Information literacy skills become even more central to meeting the requirements of dealing with complexity and large volumes of information from grey literature.

Our interests as health sciences librarians and thereby the focus of this paper lie in portraying the unstructured nature of grey literature and discussing methodologies and approaches towards teaching this elusive material to those in the health sciences sector, particularly medical students and healthcare practitioners, clients we serve within the Health Information Network Calgary. The Network was formed in 2005 through fee-for-service contracts between the University of Calgary and two partners, the Calgary Health Region and the Alberta Cancer Board. An integrated health knowledge service is provided for healthcare practitioners, staff, patients, and families from Knowledge Centres at major acute care sites, with the University of Calgary Health Sciences Library serving as the Network hub. In both medical school contexts and workplace settings, such as acute care facilities, information literacy is closely associated with the ability to acquire and develop competencies to enable individuals to think critically and use information appropriately.

Giving the end user knowledge related to research information, widening his/her horizons, and implementing critical thinking and carefulness in using information, is more essential than instruction on how to search various information resources. In our own teaching we employ case-based problem-based learning, described by L. Carder, P. Willingham and D. Bibb (2001). We have found this method more effective, active and more student-centered, as it falls in line with a general trend in education, which focuses on making our users independent lifelong learners, and also fits our service goals within the Health Information Network in meeting the needs of medical students and healthcare practitioners.

Keywords: information literacy, gray/grey literature, teaching, problem-based learning

## Introduction: The Value of Information Literacy

"Not having the information you need when you need it leaves you wanting. Not knowing where to look for that information leaves you powerless. In a society where information is king, none of us can afford that." (Lois Horowitz, 2007)

In today's society, there can be little doubt that acquiring the ability to retrieve and make use of information is an essential lifelong skill. Information literacy is indeed the root of information, as individuals need information "in order to achieve educational, social, occupational, and economic goals" (Lloyd & Williamson, 2008, p.3).

While the concept of information literacy has existed since the 1970s, originating in the workplace, (Lloyd & Williamson, 2008) differences characteristically arise when it comes to determining theories or best practices for implementing this term into instructional settings. In our experiences with information literacy at the University of Calgary Health Sciences Library and the Tom Baker Cancer Centre, we have shied away from a lecture-based approach, focusing instead on providing tools for the user (the medical student or healthcare practitioner) to think critically and apply what has been learned in class towards solving his/her own research problems.

Webber and Johnston (2000) define an information literate person as one who is "able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (p.382). We echo this notion because our goal is to allow the user to take control of his/her own learning. Rather than merely memorizing a pattern of search techniques demonstrated in class, retention of material will be better attained if the user is able to apply what has been learned to his/her own studies