Chapter 78

K–20 Education in Relation to Library Science

Lesley S. J. Farmer
California State University – Long Beach, USA

ABSTRACT

Information constitutes a central element of education as K-20 teachers design and implement curriculum for students to gain knowledge and skills. Librarians are information professionals and can play a significant role in K-12 education. This chapter discusses library science, professionals in that field, and their relationship to education, both teaching and learning. Library science's impact on education can be significant, and practices need to be assessed to determine results. Knowledge management is used as a lens for identifying several conditions needed to incorporate library science and benefit from it: curriculum, intellectual capital, leadership, community, collaboration, plans, and politics. Future trends in library science implementation are also noted.

INTRODUCTION

Information constitutes a central element of education as K-20 teachers design and implement curriculum for students to gain knowledge and skills. Librarians are information professionals, and can play a significant role in K-12 education. This chapter discusses library science, professionals in that field, and their relationship to education, both teaching and learning. Using a knowledge management lens of sharing and practicing information practice, conditions for optimizing the benefits of library science are explained.

BACKGROUND

In some cases, library science is overlooked or undervalued in K-20 education, largely because other members of the academic community do not understand the field. Thus, before being able to take full advantage of library science, educators need to become aware of, and knowledgeable about, that field, its practitioners, and their functions.

Defining the Field

Library science has been defined as "the professional knowledge and skill with which recorded

information is selected, acquired, organized, stored, maintained, retrieved, and disseminated to meet the needs of a specific clientele, usually taught at a professional library school qualified to grant a post-baccalaureate degree (Reitz, 2012). In synthesizing the domain of library science, Curran (2001) asserted that library science deals with several aspects of information: its origin, properties, dissemination, acquisition, classification, organization, storage, retrieval, interpretation, and use. Library science deals with ways to optimize the physical and intellectual access to information.

Information literacy is most commonly defined in terms of processes: the ability to locate, select, evaluate, comprehend, interpret, organize, communicate, and use information purposefully. As such, a case could be made that information literacy consists of efficiently consuming and producing information. Information literacy is needed in order to intellectually access information in its varied forms, and to act on it.

Curran (2001) stated that librarians "make their living knowing about and managing the life cycle of information—from invention through use … they administer and manage the agencies and people who do it" (p. 59). That is, library science professionals have the ability to organize and manipulate recorded information and technology. They work with contextualized information and disseminate knowledge, recognizing the value of information, which is the practical ability to apply knowledge to a specific demand. In terms of qualifications, academic librarians need a master's degree in library or information science. Educational librarians usually need a teaching credential and a educational librarian credential. Because both school and academic librarians have a responsibility to provide intellectual access and instruction along with physical access to information, the chapter will refer to both types of librarians as educational librarians.

In daily parlance, the term "library" usually refers to a physical place with resources, services, and professional staff. The California Education Code defines a educational library as follows: "a library that is established to support the curriculum-related research and instructional reading needs of pupils and teachers and provides the collections, related equipment, and instructional services of a staff for an elementary or secondary school." (EC 18810, Article 2). The code also stipulates that only a credentialed teacher librarian can provide library instruction. The law further stipulates that any library must have:

- A written explicit mission statement and service objectives.
- A fixed location in California.
- Established hours of service.
- An organized collection of information and materials accessible for use by its primary clientele.
- Designated, onsite, paid staff for library services, one of which must have a master's degree in library/information science or a California credentialed teacher librarian.

Post-secondary institutions are mandated to provide on-site access to resources and services to residents. Academic libraries maintain scholarly and deep academic collections, and some collect youth literature and educational resources. Many academic libraries offer outreach services to local high schools, such as tours and limited borrowing privileges. A few permit high schoolers, particularly those taking advanced placement courses, to borrow materials.

Operationalizing Library Science in K-20 Education

Using their knowledge of library science, librarians facilitate communication and transmission of knowledge and recorded information among humans in a social context, institutional or individual, as well as the uses and needs of the information. An information system is established between the

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