***Student Success in the Electronic Era: Why Schools Need Media Specialists Now More Than Ever***

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Students in schools with full-time, certified media specialists do significantly better on standardized tests than students in schools without certified media specialists (Bleidt, 2011; Farmer, 2006; Francis & Lance, 2011; Hughes, 2014; Hughes, et al, 2013; Kuon, Flores, & Pickett, 2014; Lance & Hofschire, 2012; Montiel-Overall, 2009; Neuman & Celano, 2001; Small & Snyder, 2010; Strong, 2014).

***Media specialists: “are uniquely qualified to teach the information literacy skills that are paramount in a knowledge-based economy” (Francis & Lance, 2011, p. 65).***

This study used a grounded theory, qualitative approach to examine sixty-seven full-text scholarly articles in the literature of Library and Information Science on the terms “Media Specialist” and “School Librarian” from 1997-2016, including sixty-eight Internet documents from state education websites and district education websites totaling 2,240 pages of documents, to determine the skills media specialists impart to students. Charmaz (2014) recommends the use of documents as a source of data, particularly in developing grounded theory. Findings,

**Media Specialists teach the following skills:**

**Information Literacy**

**Digital Literacy**

**Library and Information Science Skills**

*Throughout the Information Literacy, Digital Literacy, and Library and Information Science skills acquisition process students are:*

***Analyzing, Synthesizing, and Evaluating***

*the information they find and use.*

*Analyzing, synthesizing, and evaluating are higher-order thinking skills, Bloom (1956).*

**Information Literacy Skills**

* The Need to Access Information is Realized

In school environments, students are required to complete assignments that necessitate access to knowledge to validate their work and meet academic standards for course completion. Media specialists discuss students’ information needs, ask questions, and define the problems students seek to solve.

* The Information or the Knowledge Needed is Located

Reference questions for simple information needs are retrieved by a simple Google search.

Access to knowledge requires connecting students to peer-reviewed research articles in databases and library collections through online catalogs and interlibrary loan links. Media specialists teach the difference between popular and scholarly publications, current vs. historic documents, and the difference between primary and secondary sources.

***Students access and process knowledge rather than information. Knowledge is accessible through the scholarly work academics perform in journal articles, books, and reference materials. These resources are rarely free and require the knowledge of someone to know about them, to purchase them, and to make them accessible by organizing them and teaching students how to use them.***

**Google search = Information**

**Access to Databases + Books = Knowledge**

* The Accuracy, Value, and Relevancy of the Knowledge Located is Determined

Students evaluate the sources they find in terms of accuracy, bias, relevancy, currency, credibility, purpose, validity, and social and cultural context. Online reading comprehension is important and material from a variety of sources is synthesized. Students need to determine what they will use and not use from what appears to be limitless sources of material.

* The Knowledge Located is Organized

Material located is organized into a manageable and understandable form. A student imposes structure on the knowledge located. Students need to learn about plagiarism and how ‘cutting and pasting’ what they find is illegal. If they are writing a paper, they need to understand what style the paper will be written in and the bibliographic format they will use (i.e. APA, Chicago Style Manual, MLA, etc.)

* The Knowledge Located is Put to Use

Students have the resources they need to create a paper, a presentation, or project. Students have integrated the knowledge found and acquired into their own personal knowledge base and learning occurs.

***Schools without media specialists do not employ anyone whose explicit job it is to impart the understanding of knowledge acquisition to students.***

In addition to analysis, synthesis, and evaluation,

***Reading and Writing***

are required throughout the information literacy process, providing a well-rounded learning experience for students.

**Digital Literacy Skills**

Media specialists teach along a spectrum of digital literacy skills,

from developing usernames and passwords, manipulating a mouse, learning keyboarding, using email and websites, and practicing digital etiquette,

to the more advanced skills

of navigating social media sites such as wikis, blogs, evaluating websites, manipulating data with spreadsheets, creating multimedia presentations with digital imagery, digital audio, digital video, and using smart phone and tablet technology

to understanding how subsystems fit together to form systems or networks.

Digital literacy focuses on the technological skills required to learn, rather than the knowledge seeking behaviors associated with information literacy. Media specialists teach students about the information/knowledge resources they need, then how to use the appropriate access technology to find and use these resources.

**Library and Information Science Skills**

***Reading, reading, reading, reading, reading, reading, reading, reading, reading, reading …***

The first and primary skill related to the library and information science skills media specialists impart to students is simply reading. Students become interested in books, learn about genres, grow as readers, develop individual tastes, and learn to appreciate the content books represent, such as the natural world, science, literature, and the arts. Students also become independent and critical readers and begin to realize that reading can become an integral part of life. Throughout the enrichment reading provides, students can improve academic achievement and reading comprehension. The media specialist her/himself represents reading to students and is a role model for reading.

It has been widely shown that literacy levels improve as access to reading material and literature increases (Anderson, Wilson, & Fielding, 1988; Crosnoe & Cooper, 2010; Duke, 2000; Krashen, 2016; McQuillan & Au, 2001; Neuman & Celano, 2001; Saenz & Felix, 2007; Sanacore, 2006; Sanjana & Krolak, 2015).

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