

## COMPETENCIES REQUIRED OF A SCHOOL LIBRARY MEDIA SPECIALIST IN A HIGH-TECH SOCIETY

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### Abstract

An effective school library media program in a high-tech society would require that traditional as well as non-traditional tasks be performed by a school library media specialists. After reviewing the traditional professional tasks identified by the School Library Manpower Project (SLMP), the Jobs in Instructional Media Study (JIMS), and a Florida Study, it was recommended that eleven additional competencies be required of a school library media specialist in a high-tech society; seven are teaching-oriented and four are management-oriented.

When American society entered into Daniel Bell's post-industrial society in 1956, more Americans, for the first time in history, worked with information than in the production of goods.<sup>1</sup> It is now clear that the post-industrial society is basically an information society. In such a society, computer technology is the most important force, and introduction of the high technology of microprocessors has led our society to the second stage of technology in the information era.<sup>2</sup>

In this era, "The combined technologies of telephone, computer, and television have merged into an integrated information and communication system that transmits data and permits

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instantaneous interactions between persons and computers.<sup>3</sup> "Information explosion" is the term used to describe the enormous amount of information generated by this information society. For the first time our economy is based on a so-called "strategic resource"<sup>4</sup> which is not only renewable, but self-generating. For instance, between 6,000 and 7,000 scientific articles are published each day; scientific and technical information increases 13 percent per year and doubles every 5.5 years; and indeed information is likely to double every twenty months due to the increase in more powerful information systems and an increasing population of scientists.<sup>5</sup>

The present methods of information control will be unable to handle such levels of information. Uncontrolled and unorganized information will no longer be a resource in an information society, and could even become the enemy of the information worker. Fortunately, information technology has brought order to the chaos of the information explosion and has given value to data that could otherwise prove useless. The emphasis of the whole information society is shifting from supply to selection.<sup>6</sup> Consequently, school library media specialists, who have already been ushered into the electronic age, "are no longer just print-oriented professionals, but are involved in computer literacy and using computers as tools."<sup>7</sup> They have become the managers and facilitators of information and resources.

Efficiency in managing information resources requires of school library media specialists "the possession of necessary knowledge, skills, and abilities to achieve an acceptable level of performance" which is called competency.<sup>8</sup> An effective school library media program in a high-tech society would demand that traditional as well as non-traditional professional tasks be performed by a school library media specialist. These traditional, professional tasks were identified by the School Library Manpower Project (SLMP) in 1970, and by the Jobs in Instructional Media Study (JIMS) in 1971, respectively. Funded by the Knapp Foundation of North Carolina, SLMP identifies 300 task state-

ments in competency-based job functions performed by school library personnel at entry level. JIMS, meanwhile, yielded more than 2,000 discrete task statements each specifying "upon what instructions, who does what in relation to what or whom, to accomplish what immediate result with what tools, equipment, or work aids?"<sup>9</sup> The basic competencies in areas of research, evaluation, planning, organization, and management are stressed in both studies and are applicable to both the teaching and management-oriented competencies needed in the management of a school library media center.

In 1973, Case and Lowrey, based on the SLMP, identified 700 tasks to be performed by school library media specialists. They also grouped these tasks into seven major areas of competencies, namely, human behavior, learning and learning environment, planning and evaluation, media management, research, and professionalism.<sup>10</sup> Each task requires a specific competency or several competencies to adequately perform it in order to provide adequate media programs. "The combination of competencies needed varies from place to place because of differing curricular emphases and size and abilities of staff."<sup>11</sup>

Gillespie and Spirt grouped 100 essential tasks in three categories to be performed by professional, paraprofessional and nonprofessional personnel in a school library media center. These tasks are essential in the operation of a small school media center and range from planning, teaching research skills to evaluation and selection of materials and equipment; they may be interchangeable among the staff depending on the staffing situation in the school. Nonetheless, an effective media program would require different tasks be performed by the media personnel depending on their competencies.<sup>12</sup>

Irrespective of the clearly defined competencies of school library media specialists, there have been no concrete agreements as to what competencies are essential to all school library media specialists. A Florida study<sup>13</sup>, in 1981, revealed that randomly sampled elementary and secondary school teachers, principals,

district-level media personnel, and media specialists agreed on only 21 of the 62 competencies to be essential for media specialists. Such competencies may be further grouped into teacher, librarian, and manager oriented competencies. Teacher-oriented competencies enable school library media specialists to guide students in the use of library media centers and equipment, teach library and media skills, plan learning activities, and encourage students in their development of reading, viewing, and listening habits.

Nine of the twenty-one competencies (43%) are librarian-oriented. School library media specialists must be able to fulfill tasks in acquisition and processing of media, information services, and the use of equipment and facilities. They must acquire knowledge of school district policies and how these policies affect their library media programs. They are expected to be able to develop goals for their media programs and establish strategies and plans to achieve them. Budgeting, record keeping and maintaining rapport with library media personnel and teachers are also the required manager-oriented competencies.

A recent study by Smeltzer<sup>14</sup> reflects the changing roles of school library media specialists in the information society. It states that media specialists in Texas strongly felt that the future role of the media specialists would be to develop computer programs for classroom teachers, in spite of the fact that only 31% of them have taken coursework in computer science.<sup>15</sup> They also strongly recognize the computer's usefulness in maintaining equipment and material inventories, and in conducting database searches.

Today, "computers are in the everyday life of the children."<sup>16</sup> The use of computers in schools is wide open. They can be used for teaching computer literacy, computer-assisted instruction (CAI), computer-managed instruction (CMI), and automating systems in school library media centers. Thus, to improve the effectiveness of computer technology in the management of school library media programs in a high-tech society, eleven

additional competencies were recommended for school library media specialists—seven are teaching-oriented and four are management-oriented.<sup>17 18</sup>

A. Teaching-oriented competencies:

- a. Design, develop, and implement computer utilization. School library media specialists are involved in districtwide and schoolwide computer program planning. Their tasks include the development of a written statement of philosophy, goals and direction.
- b. Develop computer-assisted instruction units relevant to teaching units. To optimize the computer's strength in the presentation of instructional materials in interactive modes, library media specialists need to design and develop more computer-assisted instruction units, especially the units on library media skills.
- c. Prepare the computer literacy curriculum and help teach it. With the knowledge of materials in this area, school library media specialists need to provide support materials and ideas for learning activities, and take on the task of teaching lessons in computer literacy when schools do not have a computer expert on the staff.
- d. Provide inservice training. This is an important phase for the implementation of computer programs. With knowledge in hardware and software, the library media specialist is well-qualified to help design in-service activities for faculty and administrators.
- e. Teach faculty and students to use databases. As the use of commercial databases in school library media centers is no longer just futuristic, lessons and activities in online searches of databases, such as DIALOG and WILSONLINE, are becoming the parts of teaching tasks of library media specialists.
- f. Create databases for local information needs. In order to make their own teaching units relevant to subject areas,

library media specialists would have to create databases for their local needs by adapting, changing, and tailoring databases to their situation and local emphasis. Databases could include acquisitions, film rentals and reservations, scheduling of rooms, bibliographic information, and community resources files.

- g. Familiarize oneself with the information needs of faculty and students. The old cliché, "To provide the right book for the right reader at the right time", still applies to this task in the information age. School library media specialists would possess objective knowledge about the information needs of their faculty and students.

**B. Management-oriented competencies:**

- a. Select and evaluate hardware, software, and systems. Library media specialists are trained to evaluate and select audiovisual equipment and nonprint media. It is to their advantage to extend their expertise in these tasks.
- b. Design automated library management systems. In an information society, school library media centers would select efficient automated library management systems to maintain current and accurate records. To design an efficient and functional automated library management system frequently involves an evaluation of existing programs, and assessment of alternative systems prior to committing substantial resources to a system. For instance, a purchase of Follett's Circulation Plus software package will duplicate the function of The Overdue Writer produced by the same company.
- c. Develop management systems of information. Due to the change of methods and means of information storage, retrieval and transmission, school library media specialists need to develop procedures and policies for managing the information required by their clientele. Management systems for acquisitions, film rentals and reservations,

- scheduling of rooms, bibliographic information, and community resources files would certainly increase the management efficiency of the library media centers.
- d. Plan for future information networking. Networking is for sharing ideas, information and resources. School library media specialists can plan procedures for sharing their community resource databases with other school communities. "Information on community resources could be anything from an online community bulletin board to regularly printed lists or newsletters giving information on all sorts of resources, including local media, clinics, support groups, museums, business leaders, workshops, jobs, and special events."<sup>19</sup> Although Walker points out that "nowhere in the literature is there a description of a program that permits students direct access to an interlibrary lending service through local school library media centers,"<sup>20</sup> Naisbitt believes that we will increasingly rely on the networks of information and resources as the automation of bibliographic information and various databases is made more available. Nagakura's study of ten countries reveals that school library media specialists maintain affirmative attitudes toward information networking, but some suggest that "the computer terminals connected to national and/or regional data banks should be installed at district level centers."<sup>21</sup>

The title changes of school library media specialists from traditional librarians to audiovisual specialists, and to the present title reflect exactly the format changes of the medium—from books to nonprint materials and machine-readable data files. In the information society, computer technology has created new learning and teaching tools. School library media specialists will, in addition to the traditional competencies, perform the task of teaching children one of their lifelong learning needs—using a computer to function effectively within a given social role in the information society. In the 1984–85 school year, computer

hardware accounted for 17 percent of the total expenditures of school library media centers in the United States. In 1985–86, about 40 percent of school library media centers housed computers for use by students and teachers.<sup>22</sup> The above-mentioned competencies are becoming necessary so that computers in the school library media center can be effectively used as a learning or management tool. In all, the changes in competencies are caused by the dramatic changes in information and computer technology.

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