Between 1998 and 2003, a Minnesota educational reform movement named the Profile of Learning (POL) generated high levels of school library media center use in high schools and contributed to the fulfillment of the instructional role of the school library media specialist (SLMS) as described in Information Power. POL consisted of graduation standards with accompanying projects assigned to students to meet those standards. Projects were process-oriented, requiring research, reading, reflection, and synthesis of ideas. School library media center resources and services were increasingly in demand during this era. To learn more about how school library media centers and SLMSs were affected during this reform movement, the researcher sent a survey to 174 high school SLMSs. After the survey results were tallied, twelve interviews were held with selected SLMSs. Although teachers had a negative opinion of the POL era, SLMSs felt energized, important, and effective in their increasing roles of collaboration and instruction in student education during this time. The researcher also contrasted survey and interview findings with past research on the SLMS role. POL was rescinded by the Minnesota legislature before the affects of increased collaboration and resource-based learning could be assessed. The following study examines the roles and attitudes of SLMSs during the POL era, with an emphasis on the increased instructional role.

In Information Power: Building Partnerships for Learning (AASL and AECT 1998), there is a logo visually representing the components of a learning-centered school library media center. Two essential roles of the school library media specialist (SLMS) depicted in this logo are "learning and teaching" and "providing information access and delivery" (48). Both of these roles are instructional in nature and, as such, are unquestionably linked to the conceptual center of the logo--student learning--around which all program elements revolve. At the national level, student learning and academic standards are the heart of the current federal reform movement No Child Left Behind (NCLB). Key phrases and concepts from that movement, such as "closing the achievement gap," "accountability," "academic proficiency," and "adequate yearly progress," put the focus...
squarely on student learning, not seat time or credits but real advancement in what students actually know (U.S. Department of Education 2005a; 2005b).

*Information Power* defined SLMSs' central role by clearly stating that these school professionals should be directly involved in instruction and contribute to student academic achievement.

The literature of the profession shows that this ideal has been evolving during the past fifty years, as education reform movements also successively evolved, were implemented, and often later abandoned. This discussion will look at how the profession perceived its instructional role in the latter half of the twentieth century and what happened to this role and activity levels in the school library media center when a recent education reform movement in Minnesota was implemented.

**Craver's Historical Overview of the Changing Instructional Role of the High School SLMS, 1950-1986**

Craver's (1986) overview of the evolving instructional SLMS role demonstrates the gradual change in attitudes and practices taking place between the socially complacent 1950s and the disillusioned 1980s when societal problems affecting students seemed overwhelming and unsolvable. With the launching of Sputnik in the early 1950s, anti-intellectualism in America quickly gave way to concentrated efforts directed toward high educational achievement. During this decade, as educators noticed that children appeared to have individual learning styles, they came to realize that multiple information sources could nourish each of their unique intellects. This made the library a natural focal point in the school and contributed to two gradually evolving librarian roles: assistance with curriculum development (albeit limited) and initiation of course-integrated library instruction. With increasing use of course-integrated audiovisual materials during this decade and the decline of the library as study hall, the more passive librarian role of housing and providing materials slowly transformed into an active instructional role. This gradual transformation was recognized by the American Association of School Librarians (AASL) in their 1956 official statement acknowledging that librarians were becoming "coordinators, consultants and supervisors of instructional materials on each level of school administration" (Gates 1968, 235, as cited in Craver 1986).

In the turbulent 1960s, as school curriculum expanded to include such diverse new subject areas as communication, fine arts, and the humanities, students spent more time in school than previous generations had, and instructional methods became increasingly varied and creative. At the same time, federal funding became available for the development of schools, libraries, and the purchase of diverse library materials. As these education reform initiatives evolved, so did the instructional role of the school librarian, who was described as a "team teacher, learning expediter and media programming educator" (Davies 1963, 158, as cited in Craver 1986). In the latter part of the decade, research into the role of the school librarian was carried out through the School Library Manpower Project. Its publication, *Occupational Definitions for School Library Media*
Personnel showed that overall the scope and nature of the job was evolving into "an active teaching role in the instructional program of the school through instruction in the effective use of media and equipment" (School Library Manpower Project 1971, 10, as cited in Craver 1986).

The early seventies saw further educational change as the system moved from students passively receiving teacher-delivered material toward projects and activities that engaged students in their own learning more than did lectures and tests. But by the latter part of the decade, as national test scores plummeted, the public began opposing the new educational methods and called for a return to the basics.

SLMSs at this time faced several challenges and criticisms. Among various issues, they were accused of being too deeply devoted to print resources, insufficiently knowledgeable about nonprint resources, and inadequately informed about the total school curriculum. To help change the landscape, new AASL and AECT (1975) standards, Media Programs: District and School incorporated the instructional role calling for SLMSs to participate in curriculum development and carry out specific instructional purposes. However, research into the SLMS role continued to show the disparity between the real and the ideal. The instructional role was prescribed in the literature, but it was not practiced by SLMSs, who were often not perceived as instructional partners, but providers of information services.

The late 1970s and early 1980s saw a sharp decline in the American public's confidence in its schools. A Nation at Risk: An Imperative for Educational Reform by the National Commission on Excellence in Education (1983) defined the problems it perceived in American education: a diluted curriculum with too many choices for students leading to fewer students taking and completing academically rigorous courses. The report warned that America's preeminence in many domains was being overtaken by other nations. As efforts were made to return education to basics and teacher-centered learning, SLMSs continued to forge ahead with their instructional role as evidenced by such publications as The Library Specialist in Curriculum Development (Thomason 1981) and The School Librarian as Educator (Wehmeyer 1984). This was the decade that introduced the computer into the educational process with SLMSs being urged to find ways to integrate this tool into teaching units. Research studies looked at the role of instructional design, finding again that the ideal and the reality did not coincide. Staples (1981, as cited in Craver 1986) determined that SLMSs were more interested in management than instruction. Royal (1983, as cited in Craver 1986) found that Midwestern SLMSs did not carry out many instructional duties.

In spite of the seemingly glacial pace, it is clear that from 1950 to 1984 the SLMS instructional role did evolve and expand. The literature, research, and standards all reflected this development, with the SLMS instructional role usually being fervently promoted well before substantive changes in the field.

While Craver's historical review ends with the year 1984, education reform continued into the 1990s unabated. In order to encourage and support local reform as called for by A
Nation at Risk, President Clinton signed into law the Goals 2000: Educate America Act in 1994. This law, built on the theme of strong academic content and the assumption that all children can reach challenging academic standards, encouraged states to develop these standards as it provided funding to assist them in achieving whatever goals they set for themselves (U.S. Department of Education 2000).

Recent Research on the Instructional Role of the High School SLMS

Several research studies in the 1990s provide insight into how the profession continued to develop its instructional role alongside the prevailing education reform movement. Schon, Helmstadter, and Robinson (1991) investigated principals' and SLMSs' perceptions about the SLMS role in six categories of activities. They ranked the role tasks within each category according to their importance. For a category with few tasks, such as Human Behavior, which had only three identified tasks, respondents identified only the one task most important to them. For a category with many tasks, such as Library Materials, which had twelve tasks, respondents ranked the top-five most important tasks. Principals and SLMSs correlated strongly in their rankings across all the categories. Of most interest here is the Learning category, which relates to the instructional role of SLMSs. The top-two ranked tasks by both principals and librarians were related to instruction: (1) provide leadership for the determination of educational objectives for the school library media program as an integral part of the educational program of the school; and (2) plan learning activities and opportunities to enable students to assume an increasing amount of responsibility for planning, undertaking, and assessing their own learning.

Everhart (1992) conducted a work sampling study in which she matched nine pairs of high school SLMSs, one group with automated circulation systems, the other group with manual systems, in order to see how the two systems affected time spent on school library media center tasks. One hypothesis she posed was that SLMSs in automated high school library media centers would devote more time to instructional tasks than would their counterparts in nonautomated media centers. Using a random alarm mechanism (RAM) at each site, she had SLMSs mark down what they were doing on a tally form when the small alarm worn on a cord around their neck beeped. Using a Chi square analysis, Everhart found a significant difference (.05) between the time spent by the two groups on Instructional Development, defined as developing unit objectives, analyzing learner characteristics, and evaluating present learning activities for possible change, among numerous other activities. However, she found no significant difference between the two groups in the Instruction category, which was defined as teaching information skills, providing staff development, and assisting parents in sharing reading, listening, and viewing experiences with their children. In both automated and nonautomated libraries, the task category that received the most attention was administration of the school library media program.
A study of Kentucky's education reform movement and its K-12 media center environment showed a pronounced transition to the SLMS instructional role (Shannon 1996). The Kentucky Education Reform Act (KERA) of 1990 was a comprehensive restructuring of both school governance and programs that was massive and varied in its scope. To describe the impact of KERA on school library media programs as perceived by the state's SLMSs and to determine how they were supporting the law, forty-eight SLMSs (out of sixty-one) responded to a series of checklist items and open-ended questions about how their role had changed during this era.

The five specific checklist items and the percentage of respondents answering "yes" to the question "Have any of the following changed significantly since 1990?" were: (1) How teachers use the LMC (88 percent); (2) How students use the LMC (77 percent); SLMS's role in curriculum design and implementation (57 percent); Library/information skills curriculum (74 percent); and the SLMS's role as teacher (66 percent). Additionally, responses to the open-ended questions indicated that technology played a major part in shaping the SLMS role. Teachers were using media center materials more and assigning students more research projects. The heavy use of technology brought challenges as well: funding levels were perceived as being too low; time to keep up with constant changes in equipment and software or to assist teachers and students in the computer lab was inadequate; and the school library media center received no additional personnel to assist with these added responsibilities.

Respondents were asked what they did to promote the school library media center role in implementing KERA's initiatives. Their responses were largely general in nature relating to being supportive and positive about implementing KERA. The overall theme of the more specific responses focused on aspects of leadership and visibility, with SLMS indicating that they served on as many committees as possible and did everything they could to make the school library media center part of almost every student project. An aggressive public relations campaign to promote the school library media center, SLMSs asserted, was vital to the contribution of the SLMS role in fulfilling KERA's mandates.

Shannon (1996) also asked three open-ended opinion questions concerning the general role of school library media programs in Kentucky. The first question asked for suggestions for what SLMSs could do to demonstrate that the school library media program played a critical role in teaching and learning and had a positive impact on student achievement. Respondents suggested a wide variety of leadership and public relations activities. Second, respondents were asked about barriers to mounting exemplary programs that supported KERA. Responses focused on lack of time, insufficient funding, and too many added responsibilities. Lack of a state-sanctioned school library media program was also perceived as a barrier. Third, respondents were asked about what type of continuing education would be most beneficial to Kentucky's SLMSs. Technology was mentioned more frequently (68 percent) than any other topic or skill. Instruction, collaboration, or curriculum integration topics were mentioned by only 28 percent of the respondents.
Overall, Shannon (1996) found that KERA's mandates coinciding with the infusion of technology into the schools was a powerful force for change in the roles and programs of the school library media center. The instructional role of SLMSs and an information skills curriculum made gains during this era.

A recent contribution to the literature of the SLMS instructional role is Riedling's (2001) analysis of thirty-one SLMS job descriptions from the United States and Canada. Her purpose was to determine to what degree SLMSs were meeting Information Power's goal of creating a community of lifelong learners. From the job descriptions, Riedling compiled a list of approximately nine hundred duties that she combined and synthesized into sixty-seven duties in five divisions: administrative, collection development and maintenance, curriculum development, instructional consultant, and professional. The administrative role had the most duties (19). The duties relating more closely to lifelong learning (instructional consultant and curriculum development) had seventeen and eleven duties respectively. Taken together these twenty-eight duties, or 42 percent of the total, comprised the instructional role. Riedling concluded that SLMSs were appropriately responding to the goals of Information Power and meeting students' needs.

The literature of the past five decades shows the gradual evolution of the instructional role of SLMSs, even as instructional reform was being implemented in schools across the country. To what degree would the latest round of such reform in a Midwestern state coincide with the developing instructional role of SLMSs? The following study looks at the Profile of Learning (POL) in Minnesota and what happened in school library media centers during its era.

**Education Reform and POL in Minnesota**

In the 1980s, the citizens of the State of Minnesota, including business leaders, parents and others, perceived that Minnesota high school graduates were not sufficiently prepared for success in the workplace or postsecondary education. The state legislature and the state board of education concurred, indicating their intent to develop output rules, or outcomes and results that would identify what high school graduates must "know and be able to do" (Aune 2000, 2). These early steps, intended to develop graduation standards for all public school students in Minnesota, set in motion an education reform movement that ultimately achieved hot-button status among teachers and parents in the 1990s. This reform movement was built on constructivist principles, or the theory that students learn best when they build on prior knowledge and are actively engaged in the learning process. Instead of sitting passively listening to lectures, students should be involved in hands-on activities that require active gathering, organizing, and synthesizing of information; thinking critically about the information; and sharing what they have learned with their fellow students. The framers of the graduation standards cited research indicating that this kind of learning leads to deeper understanding, retention, and active use of knowledge (Aune 2000). They were determined to put these standards in place and mandate that teachers adopt them. With action from the Minnesota legislature, they did it and titled this mandate POL. The mandate consisted of what became commonly known as the Minnesota Graduation Standards. The target date for implementation of the
standards was 1998, with the first class to graduate under them projected for 2002. Public school education in Minnesota was about to be turned upside down and reinvented in ways it had never been before.

While the focus of POL was on classroom teachers and their role in implementing the new graduation standards, POL authors probably did not realize the influence it had on SLMSs when they created it. Anecdotal evidence suggested that as POL was rolled out in stages, the school library media center correspondingly became more active each school year. SLMSs were said to be in demand as never before because of the way the student learning activities were designed by the State. They were process-oriented, requiring research, reading, reflection and synthesis of ideas. In that way, POL promoted an environment that nurtured the SLMS role as defined in *Information Power* (AASL and AECT 1998): "development of a community of learners that is centered on the student and sustained by a creative energetic library media program" (6).

As POL was rescinded by the state legislature in spring 2003, it was important to capture the reflections of SLMSs on the substance and meaning of this era before this special time disappeared completely from their collective memories. From these SLMSs, we can learn much about the potential of the instruction role of SLMSs when these individuals are educators rather than "keepers of books." Indeed, as *Information Power* suggests, SLMSs should be instructional partners (collaborators) with teachers, not bystanders in student education.

**Learning Areas and Content Standards**

With input from panels, committees, public hearings, and teacher efforts, POL was shaped into the following ten learning areas:

1. Read, Listen, and View
2. Write and Speak
3. Arts and Literature
4. Mathematical Concepts and Applications
5. Inquiry and Research
6. Scientific Concepts and Applications
7. Social Studies
8. Physical Education and Lifetime Fitness
9. Economics and Business
10. World Languages

Within each learning area was a set of content standards. For example, under learning area 2, *write and speak*, there were four content standards divided into two groups. Students were required to fulfill one of their own choice from each group.

**Group One:**

- Academic Writing. Write for a variety of academic purposes and situations.
- Technical Writing. Write for a variety of technical purposes and audiences.

**Group Two:**
- Public Speaking. Construct and deliver speeches for a variety of purposes and audiences.
- Interpersonal Communication. Demonstrate effective communication skills in personal, family, community and/or work situations.

Learning Area 5, Inquiry and Research, had thirteen standards divided into two groups. Again, students chose one from each group. These standards in particular demonstrated how POL consisted of process-oriented standards that required students to understand, gather and analyze, develop and implement, and observe and investigate (Minnesota Department of Children, Families and Learning n.d.). The standards for Inquiry and Research were as follows:

**Group One:**
- Math Research. Gather and analyze information on a mathematical topic.
- History of Science. Understand the interaction between economic, technological and environmental factors and the occurrence of scientific advances.
- History through Culture. Understand historical periods through investigation of their cultural expression.
- History of the Arts. Understand the past and continuing development of an art form or theme.
- World History and Cultures. Understand the significance of events and themes across cultures and time.
- Recorders of History. Understand that historical knowledge is the result of decisions made by recorders of history.
- Issue Analysis. Research an issue and evaluate proposed positions or solutions.

**Group Two:**
- Research Process. Collect primary data to investigate a topic, problem or issue.
- Social Science Processes. Investigate historical artifacts, documents, events or concepts using social science processes.
- Research and Create a Business Plan. Develop and implement a plan to start a business or organization.
- Market Research. Investigate a product through market research.
- Case Study. Use observation and theory to study human interaction, learning or development.
- New Product Development. Research, develop and test a new product.

A salient characteristic of these projects was that they did not require students to memorize and recite facts. Instead, the projects encouraged a learning process that engaged the student with the material, requiring independent research and critical
thinking. Much of this learning process was fueled by the resources in the school library media center.

**Student Assessment and Teacher Support**

The Minnesota Department of Education (then called the Department of Children, Families, and Learning) (DCFL) maintained a Web site titled Minnesota Electronic Curriculum Repository (MECR). This Web site contained Performance Packages with assessment tasks or assignments and projects that would demonstrate achievement of the content standard. For the content standard of issue analysis in the second group under the Inquiry and Research Learning Area, specifics were given on how the student could proceed. Taken together, these steps were known as the assessment task. For a hypothetical teen issue it was specified that the student would:

- Gather information on past or contemporary issues
- Identify relevant questions or a range of viewpoints
- Summarize relevant background information
- Examine information from each source for bias and intended audience
- Identify areas of conflict, compromise or agreement among various groups concerning the issue; and
- Evaluate multiple positions and proposed solutions for the issue

An assessment task such as this would naturally make heavy use of the school library media center for researching multifaceted teen issues. Some typical research-based Performance Packages in Social Studies that potentially could generate school library media center research were:

- Compare world and U. S. perspectives on events and historical developments
- Compare the impact of diverse ideals and beliefs across eras and among world regions

Even mathematics had a suggested research component in which students were assigned to explore the development of the real number system from historical and cultural perspectives.

Reporting student achievement on assessment tasks was problematic. The state required that a rubric system be used with a score range of 0 to 4 that indicated how well the student achieved the required skill as specified in the standard. It was possible for a student to get a 3 on the project, but an A in the course. The schools were required to keep a two-tiered system showing both a student's grade and rubric score that parents could access.

Such ambitious academic expectations necessitated ongoing support from DCFL. In order to keep the lines of communication open between DCFL and the schools and ensure a two-way flow of information, each school district was required to identify a graduation standards technician, the key point of contact. Institutions of higher education in
Minnesota offering teacher education majors also had to appoint a technician. Other modes of support were:

- Workshops across the state
- Best practice networks consisting of teachers having an in-depth understanding of the Standards
- MECR, the Web site that featured model assessment packages (activities for the students to carry out in order to demonstrate attainment of the standard)
- Videotapes demonstrating exemplary student performance in several Learning Areas (Minnesota Department of Children Families and Learning 2000)

**Objectives of the Study**

The purpose of this study was to investigate the role of the school library media center and SLMSs during the POL era. Some of the questions asked were:

- Did POL create a climate which fostered increased SLMS involvement in instruction and collaboration? If so, why and how?
- What curricular areas would draw upon the school library media center resources? Would some teachers use the school library media center more than others?
- What was the relationship between SLMSs and the teachers and administrators?
- How much time would be spent on individual task categories?
- What emotions would SLMSs experience in the highly charged atmosphere created by the reform movement?
- Would SLMSs report high stress levels related to increased activity levels in the school library media center and what would they identify as the causes of the stress?

**Survey Method**

Both a survey questionnaire and individual interviews were used to elicit SLMS reflections on POL and the environment of the school library media center. These were carried out in fall 2003 and early winter 2004. The four-page survey questionnaire (appendix) was developed, tested locally in Duluth, Minnesota, and modified slightly. It was designed to be quick and easy to read and answer, even if the SLMS was interrupted while working on it. It was then sent to selected high school SLMSs in Minnesota. Because POL required twenty-four standards to be met in grades 9 through 12, only schools serving that population were selected. If a school served grades K-12 or grades 7-12, it was not selected. Unfortunately, this eliminated many smaller schools whose school library media center activities might have influenced the overall findings to some degree. A total of 174 SLMSs were sent the survey. A one dollar bill, a form for a prize drawing of $50.00, a letter of explanation and encouragement and a self-addressed, stamped envelope for return of the survey were also included in the mailing.
The questions in the structured survey were based upon the instructional role of SLMSs as discussed in the literature and on anecdotal stories from SLMSs in the state. The literature that advocates instruction as the primary role for SLMSs influenced the questions about instructional levels during the POL era. In section I of the survey, "Your Role in the Media Center," statements A1-4 focus on instruction and other SLMS roles: collaboration, administration, and public relations. This section was designed to be easy and interesting to answer, so as to engage the respondent early in the survey and deflect a desire to abandon it.

Section II A elicited information concerning which Learning Areas in POL most motivated teachers to send students to the school library media center. Respondents were asked to choose and rank the top three Learning Areas they believed were related to increasing school library media center use.

To gain an overall view of the pervasiveness of the influence of POL, question II B asked for an estimated proportion of teachers sending students to the school library media center. Question II C built on that theme by asking how much appreciation for the school library media center teachers appeared to develop during this era.

Section III, "Your Tasks," asked for respondents' estimate of the amount of time they spent on each task category. Of major interest to this study was the estimate of the time spent on instruction.

Section IV, "Your Experiences and Feelings," asked for information that could be interpreted by the respondent as being personal in nature, but by this point the respondent was well into the survey and would not be as likely to abandon it even if the questions were slightly sensitive. The literature suggesting that SLMSs are harried and overworked influenced four questions in this section (5, 7, 9 and 10). They were designed to elicit both feelings and actions that suggested a state of overwork and fatigue. Other questions in this section dealt with feelings of energy, enthusiasm, effectiveness, and attitudes toward POL.

Section V (labeled "Other") four questions asked about school library media center materials and technology budgets, and teacher and school administrator visits to the school library media center.

The demographic section (VI) concerned gender, age, years in a secondary school library media center, and the hours of assistance SLMSs received from aides or volunteers. Demographics about the school and district were obtained from DCFL (since renamed the Minnesota Department of Education) Web site.

Last, it asked for SLMSs who were willing to be interviewed.

Of the 174 surveys sent, 128 (73.5 percent) were returned, with 112 (64 percent) being usable.
Selected Survey Findings

The Learning Areas

The survey asked a variety of questions about the Learning Areas and SMLS experiences. Respondents ranked the top-three Learning Areas according to how often they perceived them to motivate teachers to send or accompany students to the school library media center (table 1).

Teacher Use of the School Library Media Center

SLMSs were also asked to estimate the percentage of teachers sending students to the school library media center. Fifty of 111 SLMSs (45 percent) estimated that between 51 and 100 percent of the teachers sent students to the school library media center for POL-related research. That leaves sixty-one SLMSs (55 percent) who perceived that less than 50 percent of the teachers sent students to the school library media center. Only one respondent indicated that no teachers sent students to the school library media center. That 55 percent of SLMSs perceived less than 50 percent of teachers sending students to the school library media center is probably due, in part, to the perception by some teachers that the standards within their own particular Learning Area did not require the use of the school library media center.

Roles of SLMSs

Of particular interest in this study was the SLMS role during the POL era. The survey asked about the increase in their instructional, collaborative, administrative, advocacy, and public relations roles. On a scale of 1 to 4 ("Not at All" to "A Lot"), the respondents indicated that both their instructional and collaborative roles increased with the mode and median for both of these roles being 3 ("Quite a Bit"). Figure 1 shows a comparison among the four roles. Clearly administration and public relations did not increase as much as instruction and collaboration.

Time Spent on Tasks

Section III of the survey asked respondents to estimate the percentage of time they spent on each of ten task categories. Figure 2 shows a comparison among them. Taken together, Instruction and Instructional Development (defined as collaboration and identifying materials for use with classes), consumed 42.25 percent of SLMSs' time. Men spent less time on these tasks (37.5 percent) than did women (45.25 percent). Clerical tasks were estimated to consume nine percent of SLMS's time. This is more time than they devoted to advocacy, cataloging, or selection of materials. Time spent on technical support showed men devoting 13.6 percent of their time on this and women only 8.3 percent. Men also spent more time on administration (12 percent) than did women (10 percent).
SLMSs' Experiences and Feelings

Section IV of the survey, "Your Experiences and Feelings," was designed to elicit SLMSs' emotions and attitudes linked to POL experiences. Table 2 shows the range of responses and their means and modes.

The highest mean score (3.2) was for "I enthusiastically collaborated with teachers." The next highest mean score (3.1) was for "My job made me feel energized," and "The classroom teachers required much of the media center." The demands on the school library media center fueled by POL did not appear to wear down or burn out SLMSs, but created feelings of vitality and engagement. That was corroborated by the low score of 1.8 for "At times I felt like staying home from work just to have a day off."

Budgetary Changes and Administrator Visits to the School Library Media Center

Only 19.8 percent of the respondents reported an increase in materials budgets and 28.8 percent reported an increase in technology budgets. The rest either remained the same or decreased.

Unfortunately, administrators were perceived as no more interested in the school library media center during the POL era than they were before (78 percent said their number of visits to the school library media center stayed the same). This is disturbing because POL was clearly structured around project-based learning, a situation that should have made administrative attention to the school library media center a given.

SLMSs and Stress

Stress was included as an important variable in this study because anecdotes by SLMSs indicated that school library media centers were extremely busy during this era and the literature itself suggests that SLMSs often feel overworked with more tasks to handle than there is time to do them. A stress score was derived from the negatively worded questions (5, 7, 9 and 10) in Section IV, "Your Experience and Feelings." The highest total stress score a respondent could get was 16 (Strongly Agree on all 4 questions). The mean stress score was 9.7. Women had a slightly higher stress score than did men (9.88 versus 9.41). Nine SLMSs, all women, who reported devoting either 15 or 20 percent of their time to cataloging, had a mean stress score of 10.88. They devoted only 22 percent of their time to instruction (versus 28 percent overall) and 10.77 percent to instructional development (collaboration, versus 14.25 percent overall).

By age of respondent, the youngest aged group and the oldest had the highest mean stress scores (10.8 and 10). By number of years on the job, the least experienced group (1-4 years), had the highest mean stress score (10.19). By student population, SLMSs at the twelve schools with populations of more than two thousand students had the highest mean stress score (10.66).
The Interviews

Survey responses (negative versus positive attitude toward POL), geographic location (rural, suburban, and urban) of SLMSs, and willingness to be interviewed for at least one hour were taken into account when choosing interview participants. Twelve SLMSs were selected to be interviewed. Table 3 shows some of the defining characteristics of each interviewee. School demographics were obtained from the DCFL. Because only high schools were included (grades 9-12) in this study, the mean school population was 1,137 students with a mean Caucasian population of 86 percent and a mean free or reduced lunch of 20 percent.

Because of the way in which the participants were selected (nonrandom) their responses should not be seen as generalizable to all the senior high SLMSs who qualified to be part of this study. Rather they provide a snapshot of selected SLMS perceptions about school library media center conditions during a momentous period in Minnesota's all-pervasive education reform movement. The interviews were tape-recorded and later transcribed. Significant statements were then extracted, grouped according to themes, and analyzed. The interview consisted of seven questions which were e-mailed to the respondents ahead of the actual interview time in order to elicit more thoughtful responses. The seven questions were:

36. You said your instructional role increased [not at all, a little bit, quite a bit, a lot] and this was [less than, as much as, more than] you would like. I'd like to hear some stories of the instruction and how it made you feel.

37. You said your collaboration role increased [not at all, a little bit, quite a bit, a lot]. I'd like to hear some stories of collaboration and how it made you feel.

38. You had a stress score of [low, moderate, high]. I'd like to hear some stories on what contributed to that stress. What happened and how it made you feel? Was it good stress or bad stress? You define.

39. You said the teachers seemed to appreciate the school library media center [not at all, a little bit, quite a bit, a lot] during the era of POL. What makes you think this? Stories, vignettes.

40. You [agreed, disagreed] that POL was good for the school library media center. What is your belief about the role of the school library media center and why was POL [good, not good] for it?

41. How is the above scenario different from what it was in the pre-POL era?

42. How do you feel now that the POL era is over? What do you think the future holds?

The significant statements from the interviews grouped according to the following themes:

43. The School Library Media Specialist and the Media Center
44. The Teachers
45. How the Learning Process Changed
46. The Flaws of POL
The following is a discussion of the some of the high points of the interviews.

The School Library Media Specialist and the Media Center

When asked to talk about what their jobs were like before the POL era, some responded emotionally about the underutilization and inappropriate utilization of the school library media center. They were bored as they waited for students with research projects to bring some intellectual stimulation. One said she "felt like a glorified, high-paid babysitter, because the media center used to be used for study hall and testing." Another commented that "we had self-contained classrooms and nobody ever stuck their noses outside, [so the media center was underutilized]."

Once POL was set in place, the teachers were somewhat fearful about its requirements. "Everyone had to take a risk and everyone had to do something a little different from what they were used to... It was a little hard for the teachers to take the plunge into some of these projects that they didn't know about ... They were out there and wondering, 'oh my goodness, what do I do now?' ... It made people aware that we were here and that was really a good thing. They saw us as an avenue of help." Now the instructional role of SLMSs emerged, a role that made SLMSs feel much better about themselves. Some comments were: "They realized I could do more than just work with computers, so that's when they started seeing my role as a teacher," and "Teachers looked to me as the vehicle for teaching the kids how to get a research paper completed."

Technology was a huge part of the POL environment. "When we were doing graduation packages, the computers were in very high demand. Especially when teachers would assign PowerPoint presentations." "We would go over the databases repeatedly with students who learned about them in multiple classes." "It was gratifying to see the students using the databases." One of the hallmarks of POL was that students should be able to "show what they know." PowerPoint was used a lot for that and "kids could come in before and after school [to use it], so the media center was very popular for that." "I could teach Microsoft Publisher. The students could do brochures and newsletters. They loved it. We were just a perfect fit."

Some SLMSs admitted a diminishing role for print materials. One justified relying heavily on digital documents because "without the Internet, there was no way you could have done the standards because you'd never find all the information you needed. You would have to rely on your print resources and you could never keep up in any given topic. You can't justify buying a book that you use once for a five-minute speech."

The Teachers

The teachers believed the whole system called their professionalism into question. It said to them that the State did not believe its own licensed teachers could make educational
decisions for their students themselves. One SLMS said, "I really sympathized with the teachers and the students because it was just foisted upon them." "Teachers were told there were things they must do in their classroom exactly the way the State wants. Teachers shouldn't be put in that kind of a mold," said another. SLMSs related stories of teachers resisting POL, actually refusing to comply in some cases. "Reluctance to go to meetings. Jokes. Ignoring directives. Sabotage. You name it." "They resisted as much as they could. It wasn't until it was kind of rammed down our throats that we started kind of doing what we were supposed to," "One teacher got burned out and left. Pulled up stakes at Christmas and said, 'This is it!'"

Younger teachers more readily complied with POL, but the older teachers knew it would all go away if they just waited it out.

Another major source of annoyance was that the State did not appear to realize that the projects would require more school library media center resources and failed to supply additional funding to purchase them. "There was no budget. That was my biggest beef. All of these unfunded mandates. Once again, someone decided that everyone was going to do this, but no one got any money to do it with."

How the Learning Process Changed

The learning process pre-POL was, according to SLMSs, mired in classroom lectures, facts, and memorization. "Classrooms were self-contained and nobody ever stuck their noses out." "Too much note-taking going on, too many tests, not enough analytical thinking." "It was teacher-centered, lectures, worksheets, and tests." With POL came project-based learning packages, requiring a shift in the way teachers delivered content and in the way student acquired knowledge. One said, "There were two good things about the grad standards: they [students] had to do research that was outside of the textbook and the second thing was it had to be real life, so they really had to think outside of the box a bit." "Teachers who never would have required research were suddenly doing it because it was required."

The Flaws of POL

Not all school library media specialists had a positive attitude toward POL. Some in suburban settings said they were already doing the kind of projects POL mandated, but were doing them better than it required. Another said POL projects were not rigorous enough. "Teachers [here] were using constructivist approaches for years. POL required them to do a poster and that sort of thing. In the media center we became providers of construction paper and glue." "One SLMS at an inner-city school said, "Students did a lot of research before the grad standards, but the grad standard one was different from what our curriculum had been doing, so it was kind of a thorn in the teacher's side."

The teachers were not nearly as enthusiastic about POL as SLMSs, saying the mandates made it too bulky, burdensome, heavy-handed, and structured. The State specified the process, product, and the assessment system. One SLMS who had a former career in
private industry where he used psychological techniques said, "People can only process between five and nine pieces of information. POL had ten different ones with countless subcategories, so it was cruel and sinking under its own weight." The content mandated by POL sometimes became an adjunct to what the teachers really wanted to teach, what had been their curriculum before POL, what they thought students should learn. "Some treated it as a kind of a stepchild, something that they had to stop their class to incorporate." "Besides that, there was a rubric-based assessment system mandated by the State, an assessment that did not even relate to the student's grade. It was possible to get an A on the project, but only a 3 on a 0 to 4 grad-standard rubric scale. Teacher frustration ran high." "Teachers were just inundated. Our district built a computer grading system, but so many teachers went in to enter their 0 to 4s, that it crashed."

These heavy demands necessitated a school-based point-person for teachers to consult. One well-meaning SLMS who liked the concept of POL volunteered to the State to be this person for his school. He soon found that his link to the hated POL meant that teachers associated him and the school library media center with it. He backed off quickly because "you cannot afford to have ill will with any faculty members because what happens is they shut their door, you don't have access to their kids."

**The Major Stressors**

There was an undercurrent of stress in most of the interviews, with scheduling the school library media center and the intense activity levels contributing the most discomfort. Teachers got desperate when a deadline for a project grew closer. Some SLMSs described teachers as fighting among themselves to get their students into the school library media center. They would erase another teacher's name from the school library media center schedule and pencil themselves in. SLMSs were uncomfortable with all of this because they could not accommodate everyone, but did not want to be stuck in the middle between two antagonistic teachers.

School library media center technology was at a premium at times. "teachers would assign PowerPoint presentations. Three and a half teachers would schedule to do their 'element' [chemistry] project at the same time, so then we had about four-hundred students who were all doing PowerPoint projects at the same time. They were lined up waiting for computers and getting very frustrated."

The school library media center became a "revolving door, with kids in and out, in and out, all day." SLMSs found it exhilarating, but wearing. Classes were scheduled for the school library media center in some schools 60 to 70 percent of the time. Some SLMSs did not have time to leave the school library media center for lunch. One said, "I didn't take a prep. It's illegal, but what can you do?"

Lack of funding was also frequently mentioned indignantly and in irritated tones. The State developed a set of standards that demanded substantial school library media center resources but never came forth with any new funding that would assure adequate collections. "There was no budget. That was my biggest beef. All of these unfunded
mandates. Once again, someone decided that everyone was going to do this, but no one got any money to do it with." Also, "There was inadequate budget and staff, and that still has not been addressed. The grad standards seemed to raise awareness of the administration that the media center lacked adequate resources." "We couldn't buy the highest level stuff with the money."

The End of POL and the Future

In spring 2003, Minnesota had a newly elected Republican governor. He and his constituents believed POL was not rigorous enough, that it stressed process over content. It was major news across the State when he convinced the legislature to repeal POL, and replaced it with a plan for a new content-rich Minnesota Academic Standards (Griesedieck 2003). Teachers were thrilled. SLMSs, on the other hand, said they were "sad," "sorry," and "disappointed."

The new content standards went into effect in fall 2003. SLMSs immediately saw a difference in the activity levels in the school library media center. One said there were few classes scheduled to come in. Their research was tremendously "dumbed down." Assignments did not require use of the databases any more. One particularly thoughtful response painted this bleak picture: "I'm concerned about these new standards. They are very fact based. It seems the only purpose is to pass the test. I had hopes that when these new standards were implemented that our business would pick up again, but I don't think so. You don't need to research fact-based standards. You just need to take notes in class, study, and pass the test. So I think maybe we've had our good years."

A few other SLMSs said that classes were coming in as before. "We are booked solid," said one. Some teachers kept the grad standards in their curriculum and had the students writing reports, and appreciation for the school library media center seems to be carrying over from the POL era.

The Larger Context

As was demonstrated through Craver's (1986) historical overview and the four 1990s research studies discussed earlier, the model for SLMSs moved persistently from keeper of books to instructional and collaborative partner. POL advanced SLMSs further along that continuum because of its emphasis on student projects instead of seat time, memorization, and tests. A comparison between the findings of the current study and the four recent studies shows similarities and differences among their various aspects and gives us a window into what we can expect in the future.

In the first of the four studies (Schon, Helmstadter, and Robinson 1991) Arizona principals and SLMSs were asked to place tasks within role categories in rank order of importance. Although there was a strong correlation in their agreement that the educational role of SLMSs and the school library media center should be ranked the highest as seen in both the Professional Matters and Learning categories, the instructional role was not specifically named in the various tasks. In contrast to that, the current study
specifically named instructional development (collaboration) and instruction, finding that these two roles consumed 42.25 percent of SLMSs' time and were judged to increase "quite a bit" during the POL era.

In the category of Library Materials, organizing library materials through a system of cataloging, classification, and indexing received the second highest ranking. Much of that work today is done by book vendors and provided for a fee to SLMSs. The current study reflected that, showing that SLMSs estimated they spent, on average, only 5.6 percent of their time on cataloging when POL was in effect.

In the category of Management, the task rated third highest out of nine was developing methods for promoting the role of the school library media program in the school and the community. In contrast, for the task of public relations, 78 percent of the Minnesota SLMSs said it increased "not at all" or only "a little bit" during POL. They also indicated they spent only 3.5 percent of their time on it. It is difficult to say why this is, when obviously the school library media center was at the heart of numerous POL student assignments. Perhaps SLMSs were so inundated with teacher and student needs that they did not feel the need to be proactive in trying to generate even more usage.

Schon, Helmstadter, and Robinson (1991) did not mention technology in any of the tasks in the six task categories. Although this study was done in the pre-Internet days, SLMSs at this time certainly were evaluating, purchasing, and providing access to other forms of technology, such as sound and video recordings and equipment on which to run them. In contrast, during the POL era, technology played a major role. SLMSs often mentioned the usage of PowerPoint as a vehicle for students to "show what they know," a central precept of the POL requirements. Also, the subscription databases were indispensable to the research projects, while technical support was estimated to consume 10.3 percent of the SLMSs' time. Clearly, technology played a major role in supporting the goals of POL, a situation that was unmatched merely thirteen years earlier in Arizona school library media centers.

The most notable difference between the two studies was that principals in Arizona appeared to be much more aware of the importance of the school library media center in student achievement than were their counterparts in Minnesota during the POL era. Seventy-eight percent of the surveyed Minnesota SLMSs said that administrator visits to the school library media center did not increase at all. At a time when the school library media center's goals and the SLMSs' instructional role were so closely linked to state-mandated student achievement outcomes, it is regrettable that many administrators appeared unaware of their opportunity to forge a new and vital relationship with this central resource for student learning.

The second study, Everhart's (1992) time analysis of nine matched pairs of media centers (those with automated circulation and those without, eighteen total), provides an opportunity to compare the time spent on school library media center tasks in two eras separated by the advent of the Internet and differences in student achievement expectations. While Everhart used the random alarm device to measure the actual time
spent on tasks, the Minnesota SLMSs were asked to estimate their time. Estimating what one is doing is not the same as actually measuring it, but a comparison of the two studies does give some insight into the more pronounced role instruction is now playing (table 4). Instruction and instructional development together took up 42.25 percent in the Minnesota study, while Everhart found only 23.4 percent of SLMSs' time devoted to those activities. Everhart found 20 percent of their time dedicated to administration versus 10.75 in the Minnesota study. Also, Everhart's participants spent more time on clerical, technical, and cataloging tasks than did Minnesota SLMSs.

In a third study, similar to the current one, Shannon (1996) investigated how SLMSs were supporting the Kentucky Education Reform Act (KERA) and what its impact was on school library media programs. The findings were remarkably similar to the Minnesota study. Answers to open-ended survey questions showed that technology affected the role of SLMSs the most, with 62 percent of the respondents (twenty-six of the forty-two respondents) mentioning its impact. The Minnesota SLMSs responded similarly in the interviews. Technology, especially the databases, was reported to be a large part of school library media center success during POL. Some Minnesota SLMSs said students could not have fulfilled the standards without the databases and the Internet.

The Kentucky survey also sought SLMS impressions of library use. Fourteen of the forty-two respondents (33 percent) reported increased use and more research being done. A comparable question in the current survey was "My estimate of the proportion of teachers in my school sending students to the media center . . . was (five choices, None, Up to 25 percent, 26-50 percent, 51-75 percent, 76-100 percent). Forty-five percent believed that 51 to 100 percent of the teachers sent students to the media center to do research.

The Kentucky survey posed a series of closed-ended questions ("yes" or "no") concerning how roles and programs changed in the reform era. One question asked about the SLMSs' instructional role, with 66 percent responding that their instructional role changed. Presumably this meant it increased. The comparable question asked of Minnesota SLMSs was to what degree did their instructional role increase. Eighty-nine percent said that their instructional role increased either "A Little Bit," "Quite a Bit," or "A Lot,"--a positive difference from the Kentucky outcome by 23 percentage points.

Another question in the closed-ended portion of the Kentucky survey asked about budgetary changes. Twenty eight respondents said there was a change in funding, with five (18 percent) of those indicating that their materials budget decreased and this was a barrier to their ability to support KERA's goals. Similarly, in spite of the obvious demand for school library media center services, in Minnesota, 27.9 percent of SLMSs reported their materials budget decreased and some mentioned in the interviews that the lack of funding from the state was a major source of irritation for them.

Shannon (1996) reported that there were few systematic public relations efforts in the Kentucky school library media programs, even though respondents clearly recognized the importance of outreach to the entire community. Minnesota SLMSs showed similar
characteristics, with 69 percent reporting that their public relations role increased "A Little Bit" or "Not at All."

The Kentucky SLMSs reported that lack of sufficient time to do everything expected of them as one barrier to supporting education reform. In contrast, despite the brisk pace in the school library media center, Minnesota SLMSs agreed that they could set priorities and get things done, although not overwhelmingly so. At a 2.99 mean, they just barely "Agreed" with this statement. SLMSs agreed that they felt as if they jumped from task to task all day (3.0 mean), yet they did not overwhelmingly take work home with them (2.5, half way between "Disagree" and "Agree.") Also, the pressure did not make them feel particularly scattered or in a disarray, as they disagreed (2.19) that they had so much work to do, they did not know where to start. Furthermore, the pressure did not make them want to stay home from work, disagreeing with statement 8 at a mean of 1.8 (close to "Disagree").

A difference between the two studies was the way in which SLMSs in the two states supported the education reform movement. Kentucky SLMSs were supportive and positive regarding KERA, making certain they stayed involved, visible and engaged in public relations activities. They served on committees and strived to integrate school library media center resources into class projects. While the Minnesota SLMSs supported POL and worked enthusiastically with the teachers on the resource-based student projects, they had to be careful not to sound too positive about it. It was such a contentious issue that any perception of SLMSs being tied too closely to POL or involved in enforcing it would turn the teachers against them.

Fourth, Riedling's (2001) examination of thirty-one SLMS job descriptions to determine if they reflect the tenets of Information Power gives us the opportunity to see how prominent the instructional role was by the very early twenty-first century. She sorted all the duties into five role divisions, two of which were Administration and Instructional Consultant. In the Minnesota study, the administrative role was shown to have lost ground to the instructional role. Riedling, only a few years earlier, identified nineteen administrative duties, or 28 percent of sixty-seven total tasks across the five roles. In contrast, she identified seventeen instructional duties, or 25 percent of the total. That is better than Everhart on the instructional role (19.2 percent) and just a little under the current study (28 percent on instruction alone, without instructional development). If we look at the years of these studies (Everhart 1992; Riedling 2001; Kelsey 2004) we see a steady progression in the perceived amount of time being devoted to the role of instruction, going from 23.4 percent in Everhart, to 25 percent in Riedling, to 28 percent in Kelsey. If this trend continues we ought to see future media specialists taking an ever more predominant role in student education through instruction and collaborative efforts with teachers.

**Conclusions**

Minnesota's vast education reform law, POL, brought the most eventful and exciting years to the school library media center that many of the state's senior high SLMSs had
ever had in their professional careers. To be sure, not everyone was thrilled, and not everyone saw great changes in their work environment, but many experienced a dramatic change in school library media center activity and in student and teacher demands on its services. None of the SLMSs was vehemently negative about the intent of POL or about its effect on their daily routine. Without a doubt, POL influenced their increased instructional and collaborative activities, moving them closer to actualizing their role as defined by *Information Power*.

Stress levels ran high, but SLMSs mostly defined it as "good stress," or the kind that was infused with a semblance of satisfaction and accomplishment. Their work made them feel energized as they witnessed increased school library media center traffic and collaborated with teachers in planning and delivering Graduation Standards packages and materials that supported student resource-based projects.

SLMSs, contrary to the teachers, had a positive attitude toward the Graduation Standards and believed they were good for the school library media center. Indeed, many lamented their demise, reflecting that best years for the media were now gone and not likely to return.

It is regrettable that the Minnesota POL did not remain in place for more years so that the effects of increased collaboration and increased resource-based learning could be assessed. If the outcomes were favorable, perhaps education reform movements in the future would be more likely to address the role and impact of the SLMS and the school library media center on student achievement.

**Further Research**

In the near future the impact of the current content-based standards and testing environment on the school library media center should be examined to determine if the instructional goals of *Information Power* are being met in this latest round of education reform in Minnesota. Given that Minnesota's public school teachers largely never accepted POL, it would also be enlightening to see if other states have successfully diffused an education reform initiative and, if so, how they accomplished this.

**Works Cited**


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