

JOB COMPETENCIES OF LEGAL SECRETARIES AND PARALEGALS
AS PERCEIVED BY SELECTED MEMBERS OF NALS . . . THE
ASSOCIATION FOR LEGAL PROFESSIONALS

Lois Inez Cox

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Except where reference is made to the work of others, the work described in this dissertation is my own or was done in collaboration with my advisory committee.
This dissertation does not include proprietary or classified information.

Lois Inez Cox

Certificate of Approval:

William Spencer
Professor
Educational Foundations
Leadership and Technology

Bonnie J. White, Chair
Humana Foundation, Germany
Sherman Distinguished
Professor of Education
Curriculum and Teaching

Gordon D. Patterson
Assistant Professor
Curriculum and Teaching

Leane B. Skinner
Associate Professor
Curriculum and Teaching

Joe F. Pittman
Interim Dean
Graduate School

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Signature of Author

Date of Graduation

VITA

Lois Inez Cox was born on August 27, 1948, in Portsmouth, Ohio, a small town on the Ohio River in south central Ohio, the only child of Walter Bannon and Ivory Cox. After graduating from Portsmouth East High School in 1966, she attended Morehead State University in Morehead, Kentucky. She obtained a bachelor of science degree with an area of concentration in business education in 1970 and a masters in business education in 1977. Her teaching career began in Ohio. She taught at Scioto County Joint Vocational School from 1971–1977, Shawnee State Community College from 1977–1980, and Buckeye Hills Career Center from 1980–1992. In January 1993 she moved to Pensacola, Florida, to become an instructor at Pensacola Christian College where she currently teaches both legal office administration and office administration courses.

DISSERTATION ABSTRACT
JOB COMPETENCIES OF LEGAL SECRETARIES AND PARALEGALS
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ASSOCIATION FOR LEGAL PROFESSIONALS

Lois Inez Cox

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(B.S., Business Education, Morehead State University, 1970)

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This national research study was conducted to determine the job competencies needed by legal secretaries and paralegals (or legal assistants). Legal secretaries and paralegals with membership in *NALS . . . the association for legal professionals* (NALS) were sampled. From a membership of 5,601, a 10% random sample was obtained from each of the eight geographical regions. A survey designed by the researcher was mailed to 564 members with 209 usable surveys being returned for a 37.06% response rate. The findings in this study are based on responses from 110 legal secretaries and 60 paralegals. SPSS 14.0 was used for data analysis which included multivariate analysis of variance (MANOVA), analysis of variance (ANOVA), Chi-Square, and descriptive statistics.

Using a Likert-type scale in which 4 represented *Absolutely Essential*, 3 *Very Important*, 2 *Somewhat Important*, and 1 *Not Important*, respondents rated 45 job tasks that had been grouped into five job competencies (personal, communications, office, computer, and information processing). Significant differences ($p \leq .05$) were found in both office and information processing competencies. Additionally, significant differences occurred in four of the eight office competencies and in two of the eight information processing competencies.

Respondents were given a list of selected computer software applications and asked to identify those they used on a weekly basis. Two software applications were statistically significant—word processing and calendaring/ docketing. Significant differences were identified in two of the selected demographics—obtaining professional certifications and the types of law firms in which respondents are employed.

Possessing high ethical standards was the most highly rated trait by both legal secretaries and paralegals. Some post-secondary training is important for both legal secretaries and paralegals. One-third of paralegals reported they also perform some legal secretarial tasks while very few legal secretaries stated they perform paralegal duties.

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Style manuals or journals: *Publication Manual of the American Psychological Association*, 2001 (Fifth Edition); Sabin, William, *The Gregg Reference Manual*, 2005 (Tenth Edition).

Computer software: Microsoft Word 2003 and SPSS (Statistical Package for Social Sciences) for Windows, Release 14.0.

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I. NATURE OF THE PROBLEM

Introduction

Since the first business educators began teaching a form of bookkeeping in the early 1700s, they have been challenged to stay abreast of changing job markets and adapt their curriculum to equip students to meet and exceed the requirements of prospective employers. The introduction of shorthand, typewriting, and calculating machines in the 1800s placed an even greater demand on these instructors to adequately prepare their students for the ever-changing work place.

Maintaining constant contact with employers and employees has been an integral part of curricular redesign. Words written in 1938 remain pertinent today: “We have a great task of preparing young people for their places in the commercial world. We are studying this problem in an attempt to revise, to reshape, to remake the curriculum of commercial education” (Adams, 1938, p. xviii).

Throughout the history of our country, business educators have demonstrated their ability to allow their curriculum to change and grow to meet the needs of the current job market. These educators have had a part in training young people at all levels of education: reading and reckoning schools, normal schools, academies, common schools, junior and senior high schools, commercial high schools, commercial colleges, business schools, business colleges, vocational schools as well as colleges and universities at both the undergraduate and graduate levels (Knepper, 1947).

Educators have often written their own textbooks and training manuals. In past generations, students used chalk to write on a slate, and as technology changed, advanced to pencils, pens, and paper. Likewise, educators adapted their curriculum to keep pace as technology advanced from manual to electric to electronic mediums. During wartime, educators were called upon to serve as soldiers or work in various jobs that arose to support the war effort. As the war ended, soldiers/educators returned to their classrooms.

Today's business educators find themselves in a technological world that is changing rapidly. Maintaining a curriculum that is up to date is challenging. Businesses and educational institutions struggle as fiscal decisions are made. Is it financially viable to purchase the latest hardware, software, and peripherals? If so, which brand name is the best buy? How soon will these purchases be obsolete? Business educators master the most recent software and then pass that mastery training to their students.

Due to employer demand, many high schools and colleges now offer specialized training for legal secretaries, paralegals, and other legal support staff. The educators who teach these courses are faced with the challenge of developing a relevant plan of study. Related research that addresses the unique job competencies of the legal support staff is needed for current and future curriculum revision; however, very few applicable studies are available. The current research study gathered information specifically related to the national employment requirements of legal secretaries.

Need for the Study

In order for educators to learn what job competencies need to be taught, they must continually communicate with employers. "Business educators need to call upon members of the legal profession to help with designing or updating their legal studies

programs” (Broadway, 1988, p. 61). The use of a survey to gather valuable data regarding current and future job skills has proven highly successful in the past and continues to be just as feasible today (Ary, Jacobs, & Razavieh, 1990; Dillman, 1978; Salant & Dillman 1994; Zikmund, 2003).

Rapidly changing technology has made the use of the survey instrument valuable for today’s business educators as pertinent information can be obtained from expert sources in a brief period of time. As with past generations, today’s business educators must determine the skills and abilities needed by their students. “Careful planning and continuous updating are essential for curriculum construction and evaluation” (Driggers, 1995, p. 1).

Purpose of the Study

Today’s law firm is looking for highly qualified legal secretaries and paralegals. The rapid innovations in computer technology and software development have created a situation whereby the skills required of both the current and prospective legal support staff are constantly fluctuating. The business education curriculum must remain up to date in order to prepare students for employment for both current and future positions.

Legal secretaries and paralegals must possess skills and abilities unique to the legal field. Research findings obtained from general secretarial employees and employers do not address the multitude of unique job competencies required of legal secretaries and paralegals (Barclay, 1950; Blyth, 1976).

Paralegals became an integral part of the legal office support staff in the 1960s. Some law firms delegate paralegal duties to the legal secretary, while other firms require the legal secretary to complete a paralegal training program. As Broadway (1988) states,

“Now that attorneys are specializing, it is important for legal secretaries and paralegals to know more. Many become a combination legal secretary/legal assistant, but is it not the same role” (p. 57). As confirmed by employment statistics, the legal profession is growing. As long as there is a demand for attorneys, there will also be a similar demand for legal secretaries and paralegals.

The purpose of this study was to identify current job competencies that are required for employment as a legal secretary or paralegal throughout the United States to assist instructors as they adapt the curriculum to meet current and future demands of these professions. Further, this data may be used by educators to assure their students that the curriculum being presented is applicable to the competencies they will need when they are employed in legal offices throughout the United States. Job skills and computer technologies that were essential five to ten years ago may not be needed today. Continual technological advancement will soon make today’s curriculum obsolete.

Additionally, educators and business people alike face the challenge of selecting the most appropriate computer hardware and software. Data collected from this research could be used to assist both educators and school administrators as they make these critical choices.

Statement of the Problem

Educators often face the challenge of developing and maintaining an up-to-date curriculum without having the opportunity to draw upon practical on-the-job experiences. Educators in many fields have relied on the survey technique to gather information from current employees that will assist them in making curricular improvements. Data have been gathered from sources such as secretaries, employers, personnel workers, trainers,

and past graduates. Findings, conclusions, and recommendations based upon data from these sources have been incorporated into the general secretarial curriculum for decades. Using members of professional organizations has proven successful when selecting individuals for participation in a survey to determine job competencies. They have demonstrated a respect for their profession, a desire to improve their own level of expertise, and an interest in encouraging the professional development of others (Barclay, 1950; Blyth, 1976, Bowes, 1990, Ward, 1974).

The legal secretarial field, however, is unique. Little relevant research exists on job competencies or job requirements. As such, the research problem of this study is to identify the job competencies required for employment as a legal secretary or paralegal as perceived by selected members of *NALS . . . the association for legal professionals* (NALS), a national organization that has been in existence since 1929.

Research Questions

Based upon the statement of the problem, the following research questions are addressed:

1. Do differences exist between the perceptions of legal secretaries and paralegals regarding the level of importance of the following job competencies? If so, what are these differences?
 - a. personal competencies
 - b. communication competencies
 - c. office competencies
 - d. computer competencies
 - e. information processing competencies

2. Do legal secretaries and paralegals differ in their use of software applications?

If so, how do they differ?

3. To what extent do legal secretaries and paralegals differ according to selected demographic variables?

- a. region
- b. professional certification
- c. type of firm
- d. years worked in a legal office

Definition of Terms

NALS . . . the association for legal professionals (NALS)—organized in 1929 and is the oldest legal support service organization in the country. The purposes of this association are to enhance the competencies of members in the legal services profession through continuing legal education and resource materials; networking opportunities at the local, state, regional, and national levels; commitment to a Code of Ethics and Professional Responsibility; and professional certification programs and designations” (Moore, 2004, p. 3). The national office is located in Tulsa, Oklahoma, with an approximate membership of 6,000 members.

Job Competencies—are the aptitudes and knowledge required for completing tasks successfully.

Legal Office Support Staff—identifies those employees in a law firm that aid attorneys in the performance of their duties.

Legal Secretary—provides the primary support for a lawyer and operates as an extension of that lawyer in the delivery of legal services.

Paralegal (or Legal Assistant)—defined as “a person qualified by education, training, and/or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible” (Hawley, 2002, p. 18). Both paralegal and legal assistant are used interchangeably; however, paralegal will be used when referring to this employee.

Outsourcing—contracting with another company or firm to provide temporary or full-time support staff or services such as paralegal service, litigation support, records management, computer support, copy center, mailroom, accounting, clerical, and document imaging.

Substantive Law—“sets out the rights and obligations of individuals. It tells us what we can legally do or what we cannot legally do” (NALS, 2001, p. 330).

Application Service Provider (ASP)—identified as an Internet-based company from which legal software applications are rented on a subscription or monthly basis.

Calendaring/Docketing Software—monitors the status of documents, maintains a reminder system of legal matters to be acted upon, keeps track of the activities and events within the firm, and produces an assortment of reports. Examples: CompuLaw, Outlook, GroupWise, Elite PracticeMaster, and ProLaw.

Case Management Software—combines several individual software applications into one: document management, calendaring, time and billing, as well as full-text searching. Examples: AbacusLaw, Amicus Attorney, and Time Matters.

Computer Assisted Transcription (CAT)—allows a court reporter, when using a specially designed Stenotype machine, to automatically input a text translation of court testimony onto a disk. This data can then be transferred into a computer.

Document Assembly Software—allows the input of client information, assists with drafting of documents, and provides access to a centralized client database. Examples: HotDocs, ProDoc, and GhostFill.

Document Imaging Software—used to convert paper documents to optical character recognition text that can then be electronically stored. A searchable database is created which allows documents to be searched, rearranged in a predetermined order, and then viewed or printed in this new order. Examples: e-Copy, Pagis Pro, DocuLex, Win Vzn, IPRO, and RUSTimage.

Document Management Software (DPS)—employs a customized database program that tracks and manages every legal document in the firm. It provides a logical directory structure for efficient retrieval to manage the entire life cycle of a document, from creation through multiple revisions and finally, into long-term storage and records management (Micheletti, 2000). Examples: Group Wise, iManage, Worldox, and DOCS Open.

Electronic Document Filing—allows law firms and local courts to exchange data using the Internet.

Litigation Presentation—integrates document management software and video presentations to produce well-organized presentations during trials. Examples: PowerPoint, TimeMap, TrialDirector, TrialPro, and Sanction II.

Litigation Support Software—contains database functions, indexing, imaging, full-text searches, analysis of substantive law, and permits access to real-time transcripts. Examples: CaseMap and Summation.

Online Legal Research Services—utilizing fee-based online services that contain the full text of federal and state case law (both current and historical), statutes and regulations, legal periodicals, and other publications (NALS, 2001, p. 135). Examples: FindLaw, Westlaw, LexisNexis, and LoisLaw.

Real-Time Software—creates read-only digitally certified transcripts of courtroom testimony for electronic distribution. The National Court Reporters Association has endorsed this technology. Examples: CaseView II, Live Caption, and OPEN.

Real-Time Translation—uses real-time software to display the text of testimony as it is being given in a deposition or trial setting. The text can be annotated during a proceeding, full-text searches can be completed, audio and video images can be inserted, and the transcripts can be exported into other litigation support software. Examples: CaseView II, Live Caption, Binder, and OPEN.

Time and Billing Software—used to record time spent and expenses incurred on each case, compute miscellaneous costs, keep track of payments received, create client invoices, monitor accounts receivable, and produce reports that assist in analyzing profitability and productivity. Examples: PCLaw, QuickBooks Pro, TABS III, Timeslips, and Juris.

Delimitations of the Study

“Delimitations are the boundaries purposely put on the study, usually to narrow it for researchability” (Mertler & Charles, 2005, p. 66). The delimitations of this study include:

1. The study was not concerned with the general secretarial curriculum, rather the generalized field of legal secretaries, paralegals, and other legal support staff.
2. The study was restricted to individuals who are currently members of NALS.
3. The study was restricted to data that could be obtained through a questionnaire.

Limitations of the Study

Conversely, “limitations refer to conditions outside the investigator’s control that affect data collection” (Mertler & Charles, 2005, p. 66). The primary limitations of the study were:

1. The willingness of current NALS members to participate in the study and to respond to the questionnaire.
2. The honesty of the respondents in answering the questions.
3. The interpretation of the questions by the respondees.

II. REVIEW OF LITERATURE

Introduction

“Business education’s future will be shaped by what we do today” (Gallo Vilee & Curran, 1999, p. iv). Although these words were written recently, they reflect the attitude business teachers have demonstrated since business education was introduced in the New World.

Business educators have been responsible for developing, revising, altering, researching, and again revising their curriculum since the first bookkeeping courses were taught in Boston and New York in the 1700s. At that time, the instructors were businessmen who were proficient in both foreign and domestic trade. They organized the curriculum based on their on-the-job experiences.

Apprenticeships were also a commonly accepted procedure for preparing students to meet the demands of prospective employers. An 1892 business education report called for specialized schools “whose curriculum should reflect the wants of future businessmen” (Schmidt, Jennings, & Wanous, 1990, p. 7).

In 1938, William E. Douglas, President of the Eastern Commercial Teachers’ Association, challenged business educators when he said, “The way in which these constant changes have been successfully met was by discovering the needs of the business community and allowing the curriculum to be continuously shaped to meet these needs” (pg. xxi.). Similarly, the business community has faced these same challenges.

Katner (1991) expressed the feelings of generations of business people when she said, “We are in a world where change is so rampant that our views of a future unfolding logically from the past are no longer possible” (p. 135). Today’s business people as well as today’s educators are charged with the same responsibility as those in the past—accept continual change as a certainty, adapt to these changes through creative thinking, research new ideas and techniques, incorporate proven innovations into the profession, and realize that change will be a recurring process.

If students are to develop realistic employability skills, business educators need to link their curricular offerings to the demands of the business community. As long as the business world is in a state of constant change, the business education curriculum must be routinely revised to meet these changes. This affiliation was true in the 1600s and has remained true for centuries.

Chapter II traces the historical changes that have taken place in America—in business, in education, and in the professional development of business educators. Additionally, the job competencies required for success as general secretaries, legal secretaries, and paralegals are also summarized.

History of Change in Businesses

As the first settlers arrived in America, they brought their own technological skills with them. As the centuries passed, the creation of many large corporations helped the American economy grow to become the largest in the world. By the 1940s, American business prided itself on being a world leader in both scientific and technological development. This success continued for about two more decades (Inman, 1991, p. 361).

Inman (1991) indicated, however, that America's gross national product saw a growth in international trade from 3% in 1960 to 12% by the late 1980s. American businesses were beginning to realize that the industrial base of the United States had weakened while other countries such as Japan and those in Western Europe were experiencing growth.

Business leaders in the United States were challenged to find solutions to this serious problem. They realized that they had only one solution—examine what had been done in the past, identify areas of weaknesses, determine what could be learned from the success of other countries, and change their commonly accepted procedures to meet the needs of the changing workplace. Without a willingness to introduce change and innovation into American businesses, falling further behind the technological advances of other countries was assured (Inman, 1991).

America's business community also realized that the incorporation of drastic changes in their methodology did not guarantee future success. As they endeavored to develop up-to-date businesses, foreign companies were also developing creative methods and strategies. It became clear that continual research would need to be done and additional changes would need to be made on a yearly, monthly, or even weekly basis if the firms were to remain competitive (Inman, 1991).

In 1991, Starr stated that the problem businesses face when attempting to become globally competitive from year to year is that “we are dealing with dynamic systems with changing rules and moving targets” (p. 177). As the American business community faces continual change, educational institutions need to be aware of these changes and revise the curriculum so that students are fully prepared to be successful in their careers.

General Education

In April 1991, President George H. W. Bush released AMERICA 2000: An Education Strategy. The objectives of this plan were to challenge each citizen, community leader, parent, teacher, and administrator to become involved, by the year 2000, with transforming every community and every school into a place where education can flourish, where students are encouraged to strive for excellence, and where they can become excited about school and learning (U.S. Department of Labor, 1991).

The Secretary's Commission on Achieving Necessary Skills (SCANS) had developed the strategies that were presented in this report. Secretary of Labor William Brock was instrumental in organizing this "major research effort to forge a common understanding as a guide to action in coping with the overwhelming economic change" (Carnevale, 1991, p. xiv.). The conclusions of the SCANS research, which have been presented in several published reports, have been widely accepted by the American educational community. The National Council on Education Standards and Testing encourages the integration of these findings into national standards and assessments of core academic subjects.

The SCANS reports establish guidelines for use by national, state, and local groups if America is to remain a leader in the fast-changing global economy. Since good jobs depend upon people who can put knowledge to work, students should be encouraged to be creative, to develop skills and attitudes on which employers can build, and to be problem solvers. The SCANS reports outlined a three-part foundation of intellectual skills and personal qualities all students should possess. These skills include:

1. Basic Skills—reading, writing, arithmetic and mathematics, and speaking and listening.
2. Thinking Skills—thinking creatively, making decisions, solving problems, seeing things in the mind’s eye, knowing how to learn, and reasoning.
3. Personal Qualities—individual responsibility, self-esteem, sociability, self-management, and integrity (U.S. Department of Labor, 1991, p. vii.).

In addition to these three foundational skills, the SCANS reports also identified five competencies as indispensable components of every school curriculum. These competencies represent “essential preparation for all students, both those going directly to work and those planning further education” (U.S. Department of Labor, 1991, p. vi.).

As identified by the SCANS reports, every worker must be able to productively use the following competencies:

1. Resources—allocating time, money, materials, space, and staff.
2. Interpersonal Skills—working on teams, teaching others, serving customers, leading, negotiating, and working well with people from culturally diverse backgrounds.
3. Information—acquiring and evaluating data, organizing and maintaining files, interpreting and communicating, and using computers to process information.
4. Systems—understanding social, organizational, and technological systems, monitoring and correcting performance, and designing or improving systems.
5. Technology—selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies (U.S. Department of Labor, 1991, p. vii.).

Eleven years later, Berry (2002) found that “the cybercareers also emphasize the combination of knowledge and skills required in the workplace, a need emphasized for more than a decade in the Secretary’s Commission on Achieving Necessary Skills recommendations [*sic*]” (p. 213).

History of Change in Business Education in America

Since the introduction of microcomputers in the 1970s, business education teachers have struggled to develop and maintain up-to-date curricular offerings that meet and exceed the requirements of rapidly changing business offices. Many educators and business people feel that they are faced with the most rapidly changing time in the history of the United States. A brief examination of the changes business educators and business people faced in the past, however, reveals that flexibility, creativity, and originality are not unique traits for today alone. Throughout history the educational and business communities have dealt with each change as it occurred and successfully incorporated each invention into their respective professions.

Schmidt, Jennings, & Wanous (1990) reported that business education was first introduced in the United States in the late 1600s when a form of business arithmetic was taught in a Plymouth Colony school. Bookkeeping instruction was offered in Boston by 1709 and became a required course in all Massachusetts public high schools by 1827. Shorthand was first offered in American public high schools by 1862. After the invention of a practical typewriter in 1868, instruction in the touch typewriting method became commonplace by 1900 (Waters, 1987). Garfield (1986) states, “The proliferation of secretarial occupations occurred during the nineteenth century, in the wake of the Industrial Revolution” (p. 14).

Technology has also transformed the typewriter. As electricity was introduced to the factories, offices, and schools, manual typewriters were replaced with electric ones. The Selectric typewriter was introduced in 1961, both the magnetic card Selectric typewriter and the magnetic-tape Selectric typewriter (MT/ST) in 1964, and the electronic typewriter in 1978. Correction tape and storage capabilities were also added (Schmidt, Jennings, & Wanous, 1990).

“When the typewriter became commercially successful and shorthand systems found their way into offices throughout the latter part of the nineteenth century, researchers followed with productivity standards based on output and skill measurement tasks” (Bronner, 1978, p. 77). The United States saw the introduction of the first calculator by 1912, and further refinements produced the ten-key adding machine in 1914. The stenotype machine was invented in 1876, and the Hollerith code was developed in 1887 (Schmidt, Jennings, & Wanous, 1990).

The comprehensive high school gained wide approval in the United States by 1862. Both bookkeeping and shorthand were commonly taught in these schools; and many educators feel that during this time of growth and change, business education became accepted as a viable segment of the overall secondary curriculum. The first high school designed solely for business education training was opened in 1890. These schools initially flourished but became obsolete by 1920 because business programs had become an accepted part of the high school curriculum (Schmidt, Jennings, & Wanous, 1990).

The establishment and successful growth of colleges designed to train business students in the knowledge and skills required for office employment took place during the 1800s. Initially, many of these post-secondary institutions were private business

colleges. By 1871, a number of universities had included business education—or commercial training as it was known at that time—as curricular offerings; and the number of private business colleges declined.

In 1906, cooperative part-time training was introduced at one university. Following the success of these programs, similar on-the-job preparation programs were introduced at the secondary and post-secondary levels (Schmidt, Jennings, & Wanous, 1990).

In 1833, the first machine was built that would store information for automatic operation. It was not until 1944 that the first electromechanical computer, the Mark I, was developed. The Mark 1 was controlled using punched paper tape. Development of the ENIAC computer took place in 1946. The UNIVAC computer was first produced for commercial use in 1951, and in 1954 one was built for business data processing (Schmidt, Jennings, & Wanous, 1990).

Computers first appeared in factories in the mid-1950s when the use of punched-paper tape allowed the computers to guide metal milling machines. Transistors were introduced in 1958 and chips in 1964. The early 1960s saw the introduction of Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) software that produced a revolution in the manufacturing industry (Bylinsky, 1982). Incorporating computer technology into the manufacturing process greatly improved efficiency and allowed goods to be produced much more quickly.

Digital Corporation introduced the digital computer in 1965, and computers that used microprocessors were developed in 1976. These microcomputers were being used in offices by 1989 (Schmidt, Jennings, & Wanous, 1990). In order for business educators to

understand the enormous impact of increased computer use on their curriculum, researchers conducted studies to pinpoint current and future trends in prospective job markets.

Professional Development for Business Educators

One aspect of business educators maintaining up-to-date curricular offerings is continual professional growth and training. To meet that need, professional organizations and publications have been organized.

Professional organizations. The National Secretaries Association originated in 1942, became Professional Secretaries International (PSI) in 1981, and is currently named the International Association of Administrative Professionals (IAAP).

Organization of the National Association of Commercial Teacher-Training Institutions occurred in 1927 and became the National Association for Business Teacher Education (NATBE) in 1957 (Schmidt, Jennings, & Wanous, 1990).

The National Union of Colleges was formed in 1866 by private school owners, renamed the International Business College Association the following year, and dissolved several years later. The Business Educators' Association was founded in 1878 and became part of the National Education Association in 1892. Several private school members left the National Education Association in 1895 and formed the National Commercial Teachers Association that became the National Business Teachers Association (Schmidt, Jennings, & Wanous, 1990).

The history of the National Business Education Association (NBEA) is quite complex. Originally, only two professional organizations existed for business educators: the Eastern Commercial Teachers Association, which began in 1897, and the Southern

Commercial Teachers Association, which formed in 1922. Both organizations later replaced Commercial with Business in their names (Schmidt, Jennings, & Wanous, 1990).

The National Association of Business Teacher-Training Institutions and the International Association for Business Education became divisions of the United Business Education Association in 1947. The Southern Business Teachers Association joined in 1950 and became the first region of the United Business Education Association. Two other regions were also organized: the Western Business Education Association in 1951 and the Mountain-Plains Business Education Association in 1952.

The United Business Education Association saw three major changes occur in 1962. For the first time, business educators experienced national unity, as the Eastern Business Education Association became a region of the United Business Education Association. The National Business Teachers Association also became a region and was renamed the North-Central Business Education Association. The United Business Education Association changed its name to the National Business Education Association (NBEA). Incorporation of NBEA occurred in 1969 (Schmidt, Jennings, & Wanous, 1990).

The International Society for Business Education (ISBE) was founded in Zurich, Switzerland, in 1901. The United States Chapter of the International Society of Business Education became the international affiliate of NBEA in 1971 (Schmidt, Jennings, & Wanous, 1990).

The United States Office of Education was originally created in 1867. The Department of Education was formed in 1980, and business education was placed within the Division of Vocational Education (Schmidt, Jennings, & Wanous, 1990).

The National Association of Legal Secretaries, founded in 1929 and incorporated in 1949 (*NALS frequently asked questions*, 2008), has also experienced several modifications. The original name of this organization—the Legal Secretaries Association—was changed to the National Association of Legal Secretaries, and in 1999 it became NALS . . . the association for legal professionals (Maslowski, 2002). Paralegals were given their own designation in 1973; but by 1975, they had formed their own organization, the National Association of Legal Assistants (NALA) that is still in existence (Harrison, 1999; Terhune, 1974). However, paralegals also continue to maintain their membership in NALS . . . the association for legal professionals (NALS).

Professional publications. Business educators have developed a long-standing tradition of communication within the profession. The first yearbook of the Eastern Commercial Teachers Association was published in 1928. The first American Business Education yearbook was produced in 1944, and for several years was a joint publication of the Eastern Commercial Teachers Association and the National Business Teachers Association (Schmidt, Jennings, & Wanous, 1990). The 2006 yearbook of the National Business Education Association represents 44 years of this publication.

This tradition also extends to the production of periodicals and journals. As early as 1848, a magazine devoted exclusively to shorthand was published. *Phonographic World*, a magazine devoted to shorthand and typewriting teachers, was introduced in

1885. After a series of name changes, this publication became the *Journal of Education for Business* in 1985.

The *Gregg Writer* was published from 1899 until 1950 when *Today's Secretary* took its place. The name of *The Secretary* was changed to *Office Pro* (Schmidt, Jennings, & Wanous, 1990).

Job Skills Needed by General Secretaries

With the growth of professional business education associations from the 1800s until today, a major focus of each organization has been to assist business educators with the development and implementation of up-to-date curricular offerings. As a result, each generation of students has consistently received training in those skills unique to the current demands of prospective employers. “Probably no other mechanism has contributed more to the advancement of business education than the implementation of sound research findings” (Meggison, 2002, p. 305).

McGrew (2001) predicts that current and future business educators will confront challenges as they attempt to develop a relevant, dynamic curriculum when she states, “Changes in the 21st century will increase the demands for business teachers to stay current in the profession. These demands occur as a result of anticipated changes, as well as issues even the most innovative visionaries have yet to imagine” (p. 82).

Charters and Whitley conducted an expansive one-year study in 1929 with a two-fold purpose: “First, to determine the duties performed by the secretary to business men [*sic*] and administrators; second, to determine the qualities which are conspicuously present in successful secretaries and conspicuously absent in unsuccessful secretaries” (p. 11). The researchers were interested in collecting information that could be used by

employers, secretaries, and “teachers of commercial subjects” (p. 12). After interviewing 125 secretaries, the researchers developed a list of 871 duties and traits and administered it to an additional 715 secretaries (p. 11). Thirteen of the respondents had completed their schooling between 1888 and 1900 (p. 42).

The researchers also interviewed employers and compared the responses of both groups. The results of this study reflect, to a certain extent, the findings of more recent research. In 1929, secretaries reported that their most frequent duty was typewriting business letters, and their employers felt the greatest weakness of their secretaries “which was mentioned far more frequently than any other was, of course, English, with its dependent items of punctuation, spelling, grammar, letter-writing, vocabulary” (p. 179).

During the past seven decades, researchers and authors alike have discovered that many of the job characteristics needed by the successful secretary in 1929 are still indispensable in 2002. Numerous research studies have determined that keyboarding is an indispensable skill for secretaries (Daggett & Jaffarian, 1990; Dee, 1992; McGrew, 2001; Walker, 1991; Wiggs et al., 1998).

Business educators have been challenged, though, to update their keyboarding equipment to meet the changing demands of prospective employers. The manual typewriter experienced a tremendous evolution—from electric to electronic to digital to voice recognition technology; and “it appears that secretaries and administrative assistants need a wide variety of computer skills to meet the demands of business and industry” (Haff, 1993, p. 14).

Researchers continue to report that secretaries must be extremely proficient in a wide variety of English aptitudes including proofreading, spelling, and the use of

language skills (Place & Strony, 1954; Timm, 2002; Williams, 1993) as well as expert written and oral business communication skills (Charters & Whitley, 1929; Frueling et al., 1997; McGrew, 2001; Meggison, 2002; Sink & Dugal, 1992). Further, transcription remains a useful skill. In 1929, secretaries transcribed from shorthand notes; but as the years passed, secretaries found that their expert shorthand abilities gave way to transcription of prerecorded dictation (Charters & Whitley, 1929; Dee, 1992; Place & Strony, 1954; Walker, 1991). Even in 1929, answering the telephone was the second most frequently performed task. Place and Strony (1954) and Dee (1992) reported that this remains a required job competency.

The secretaries in 1929 were expected to perform several tasks no longer needed today. They were expected to send cablegrams, send telegrams by means of a call box, and wind the clock. In contrast, today's secretaries possess job competencies unique to the 21st century. For example, they maintain secure web sites and not only understand but implement "legal and ethical aspects of software copyright and privacy issues" (McDonald & Echernacht, 2001, p. 35). Likewise, Meggison (2002) found that today's office personnel might also be expected to meticulously maintain the security of computerized information and implement a system for recovery of destroyed data.

Timm (2002) states, "In the 21st century all business is global business. However, global electronic commerce (e-commerce) is still in its infancy" (p. 116). According to Timm, secretaries in the 21st century may find they will need to continually develop new skills and procedures in order to stay abreast of each technological innovation. Kunar (1997) also reported that secretaries should possess critical thinking skills. As Garfield (1986) states:

Clearly the term “secretary” covers a large variety of positions. Whether designated Confidential, Personal, Executive, Private, Staff, or other combinations, the professional secretary is not just a person who uses the tools and skills of the typist-stenographer or information manager. The secretary as “assistant to” must manage people successfully with tact and diplomacy (p. 16).

History of Lawyers and Legal Secretaries

Lawyers who practiced law in the 18th and early 19th centuries traveled throughout their local areas to meet with their clients. As they did not have clerks, lawyers were responsible for producing all of their own paperwork. Tremendous advancements took place during the 19th century that directly impacted every segment of the legal profession. The telegraph, telephone, and typewriter were introduced in law offices. As a result of the Industrial Revolution, unprecedented growth took place in both government and corporations. With this growth came an increased need for a variety of new legal services (Harrison, 1999).

In the 19th century, men held most of the office clerk positions. Their main job responsibilities were bookkeeping and stenography skills. By 1890, male court reporters wrote the court proceedings in shorthand, the office stenographers (quite often a male) took dictation in the office, and typists were responsible for transcribing the shorthand notes that other employees had taken (Murphree, 1981).

By the beginning of the 20th century, however, women had begun to dominate these positions; and soon each attorney had his own private secretary. For the first time, this occupation was referred to as legal secretary. Murphree (1981) states, “As early as 1914 the occupation of legal secretary had begun to be thought of not only as a proper,

but as a prestigious occupation for working women. By the mid-1950's this image was well established" (p. 64).

Female legal secretaries possessed the unique job competencies required by the attorneys and were capable of operating a variety of office equipment such as the typewriter, switchboard, calculator, Dictaphone, addressing machine, shredder, duplicator, and mimeograph. McLaughlin (1965) determined that legal secretaries were now well accepted and gaining in popularity. Due to an increase in large law firms, one secretary for one attorney is no longer commonplace.

The use of identical job titles has become a confusing aspect of the legal profession. For the purpose of this study, the researcher will use paralegal instead of legal assistant; however, both attorney and lawyer will be used interchangeably throughout this study.

History of NALS . . . the Association for Legal Professionals

The Legal Secretaries Association was formed in 1929 in Long Beach, California, by a legal secretary, Eula Mae Jett (Hailey, 2004, p. 33). At that time, its sole purpose was to educate legal secretaries concerning the correct preparation of legal documents. As NALS has grown, its membership became more diverse:

Membership is available to all persons engaged in work of a legal nature, such as law office administrators, legal secretaries, legal assistants, stenographers, or employees of public and private institutions. Lawyers, judges, and educators may join NALS as associate members, and there is a special class of membership available to students (NALS, 2001, p. 15).

To more accurately reflect the diversity of the current membership, the name of the organization was changed in 1999 from the National Association of Legal Secretaries to NALS . . . the association for legal professionals; and by 2004, paralegals comprised “more than 50 percent of its membership” (Ng, 2004, p. 18).

Today, NALS is dedicated to the professional development of its members as reflected in its Missions Statement:

NALS is dedicated to enhancing the competencies of members in the legal services profession. It accomplishes its mission and supports the public interest through:

- Continuing legal education and resource materials.
- Networking opportunities at the local, state, regional, and national levels.
- Commitment to a Code of Ethics & Professional Responsibility.
- Professional certification programs and designations (What’s new @ NALS?, 2007, p. 5).

Basic and advanced legal training courses are conducted at the local, state, regional, and national levels. Conferences and seminars are offered each year. Continuing education credit may be earned by participation in selected activities, some of which are available online. Textbooks, manuals, and handbooks have been developed; and members receive a monthly magazine, *@Law*. A monthly online chat is conducted in which relevant topics are discussed. All NALS members are expected to adhere strictly to the Code of Professional Responsibility of the American Bar Association as well as the NALS Code of Ethics & Professional Responsibility.

“NALS has been certifying individuals since 1960, longer than any other legal support professional organization” (Hailey, 2004, p. 33). NALS has developed three voluntary professional certifications: the ALS, PLS, and PP. The continuing importance of these certifications was expressed by Mary Burns, the 2004–2005 NALS President:

Through the educational offerings at our multi-levels (chapter, state, regional, and national), the NALS certification examinations by which we invite and challenge our members to expand their legal knowledge by studying and sitting for (ALS . . . the basic certification for the legal professional, PLS . . . the advanced certification for the legal professional, and the Certified Professional Paralegal), and the dedication, commitment, and responsibility that we , as an association, have devoted to the legal profession since 1929, our members have shown a desire and continue to strive for these ideals of truth and justice (2004, p. 5).

ALS . . . the basic certification for the legal professional (formerly called the Accredited Legal Secretary) certification is designed for individuals at the apprentice level. Certification can be obtained by satisfactory performance on a four-hour, three-part examination covering written communication; office procedures and legal knowledge; and ethics, human relations, and judgment. NALS reports that 2,637 individuals have received ALS certification (*NALS legal professional certification*, 2008).

The PLS . . . the advanced certification for the legal professional (formerly the Professional Legal Secretary) requires successful completion of a one-day examination in which four areas are tested: written communication; office procedures and technology; ethics and judgment; and legal knowledge and skills. This designation is for the exceptional legal secretary:

to certify a legal secretary as an executive assistant who possesses a mastery of office and people skills and who demonstrates the ability to interact on a professional level with lawyers, clients, secretaries, legal secretaries, legal assistants, office administrators, judges, and court officials (NALS, 2001, p. 16). Currently 5,459 individuals have earned this designation (*NALS legal professional certification, 2008*).

The Professional Paralegal (PP) examination is the newest certification offered by NALS. This certification may be obtained by successfully completing a one-day, four-part examination. Those areas included in the examination are written communications, legal knowledge and skills, ethics and judgment skills, and substantive law. Currently, 390 individuals have obtained the PP certification (*NALS legal professional certification, 2008*).

These certifications are available to NALS members and nonmembers. Students are also eligible to take the ALS examination. In order to take the PLS examination, however, an applicant must have three years of experience in the legal field. A maximum of one year may be waived if the applicant has received a post-secondary degree or currently holds an ALS or other certification. Those earning the PLS designation must obtain recertification every five years through continuing education hours or selected activities. All three certifications “are approved by the American Council on Education (ACE) for college credit (ALS and PP approvals in process). The NALS certifications are the only legal support certifications awarded college credits by ACE” (Hailey, 2004, p. 33).

The 2005–2006 President, Mary Jo Denman, reiterated the direction NALS continues to take, “So we flow from year to year, always striving to improve and looking ahead to make sure the services and programs that NALS offers to our members will keep us all prepared for the future” (2005, p. 6).

Use of the NALS Members by Researchers

Research has been collected through the years that business educators have used to revise and adapt their secretarial curriculum to meet the needs of the business community. Unfortunately, few studies have been conducted that specifically target the skills and abilities needed by the legal secretary.

According to Camfield (1983), educators should revise the legal secretarial curriculum based on related research and follow-up studies; but from 1970–1982 little was written on this topic. Earlier researchers had also discovered that research related to legal secretarial job competencies was inadequate. Barclay (1950) reported that a job analysis had never been conducted for legal secretaries, and Ward (1974) found a need for additional investigation into the job requirements of the legal secretary. More recently, Bowes (1990) stated that there is still a lack of scholarly investigation to determine the “specific nature of legal secretarial word processing training” (p. 58).

Even though the legal secretary shares many required job competencies with the traditional secretary, the unique nature of the profession demands that research be conducted in which the respondents are lawyers and law office support staff (Blackburn, 1981; Bowes, 1990; Camfield, 1983). Further, Ward (1974) stated, “A secretary is a secretary until she becomes a legal secretary. Then she enters a new and different world of new terminology, ideology, and responsibility” (p. 9).

To maintain an up-to-date legal secretarial curriculum, it is helpful for educators to have research findings from individuals currently working in legal offices around the nation. To fulfill that need, several researchers have chosen to survey members of local NALS chapters.

Barclay (1950) conducted a study of 88 members of the Los Angeles, California, chapter of the Legal Secretaries Association just before the organization became the National Association of Legal Secretaries. Barclay surveyed the legal secretaries using a job analysis checklist. A recommended course of study for the legal secretarial program at the University of Southern California was then developed based upon these results. Barclay stated that the most reliable research findings would be obtained by using the members of the Legal Secretaries Association:

Too, by contacting legal secretaries in the field who are progressive and professional-minded enough to belong to such an organization, there was an assurance that the opinions received would be all the more valid for they would come from those who are conscientious about their work, consider their profession a worthwhile one, and who would be extremely interested in enhancing their profession by adding to their ranks intelligent occupationally-trained secretaries who “know what the score is” when they enter the field (p. 44).

The most comprehensive study of the job competencies of the legal secretary was conducted by NALS itself. The goal of the three-year national investigation, which concluded in 1974, was the development of a valid Professional Legal Secretary (PLS) certification examination. A comprehensive list of duties most frequently performed by a legal secretary were identified and organized into six major classifications:

1. Written Business Communication Skills and Knowledge
2. Human Relations and Professional Ethics
3. Secretarial Procedures and Office Management
4. Secretarial Accounting
5. Legal Terminology and Techniques
6. Legal Secretarial Skills and Exercise of Judgment

These six categories formed the basis for the PLS certification examination (Terhune, 1974, p. 263).

Blyth (1976) studied three groups: selected members of the Dearborn, Michigan, chapter of the National Association of Legal Secretaries who had received their PLS certifications; legal secretaries with less than one year of experience; and postsecondary students who had completed a specific sequence of courses in a legal secretarial program. The purpose of this study was the development of a Legal Secretarial Competency Examination that would be available for prospective employers and educational institutions to use. Members of NALS were selected for this study since “NALS membership . . . is an indication of professionalism and probable competency in a wide range of commonly required skills and knowledge” (Blyth, 1976, p. 22).

Job Skills Needed by Legal Secretaries

In the early 1900s, typewriters, telephones, adding machines, as well as shorthand dictation and transcription, formed the nucleus of the office in which the legal secretary worked. The 1929 Charters and Whitley study included 49 legal secretaries. Their findings determined the unique skills of legal secretaries that educators must consider when developing curriculum: “the one unusual thing to which attention needs to be paid

is that care should be taken to see that in dictation, transcription, typewriting and filing, some of the material used should be briefs, wills, deeds, and so on” (p. 121).

As the decades passed, refinements were made to the equipment, and machine dictation replaced shorthand use in many offices; however, the basic skills and abilities needed by the legal secretary remained fairly consistent (Barclay, 1950; McLaughlin, 1965; Mitchell, 1999; Ward, 1974). Blondefield (1984) stated, “Skills required of legal secretaries are usually higher than those required of regular secretaries” (p. 23).

Even though there have been a limited number of scholarly research studies conducted regarding past and present job competencies of the legal secretary, there is a reasonable consensus among these researchers. Certain job characteristics of the legal secretary have not changed—neither before nor after the introduction of computer technology. The legal secretary must be extremely knowledgeable about the various court systems, the nature of trials, and proper legal procedures to be followed (Barclay, 1950; Broadway, 1988; Camfield, 1983; McLaughlin, 1965; Ward, 1974).

One of the most common tasks of the legal secretary is the preparation of legal documents either on the typewriter or computer. Accomplishing this task quickly and efficiently requires expert keyboarding skills (Barclay, 1950; Blackburn, 1981; Blondefield, 1984), accurate use of legal terminology (Barclay, 1950; Blyth, 1976; Murphree, 1981), and correct formatting of legal documents (Camfield, 1983; Holmes, 1986; Ward, 1974). These legal documents may consist of letters, interoffice memoranda, contracts, forms, or court documents.

It is the responsibility of the legal secretary to know which forms to prepare, how many copies need to be made, how and where to file the documents within the court

system, and how to deliver them to the client (Blackburn, 1981). Filing court documents electronically is becoming very popular. Carelessness on the part of the legal secretary could create tremendous problems for the law firm, an issue that makes accuracy another vital trait of the legal secretary.

Because many documents prepared by the legal secretary must be error free, proofreading, legal punctuation, grammar, and business English are required skills (Barclay, 1950; Camfield, 1983; McLaughlin, 1965; Ward, 1974). A legal secretary may also be expected to compose a variety of legal documents (Camfield, 1983; Murphree, 1981).

People skills are also necessary for the successful legal secretary. For example, greeting clients and speaking on the telephone are a daily occurrence (Blondefield, 1984; Mitchell, 1999; Ward, 1974). Additionally, the legal secretary is expected to be discerning, diplomatic, and remain poised while working under pressure (Barclay, 1950; Blyth, 1976; McLaughlin, 1965). Additionally, Barrett (1995) concluded that “professional development is just as essential as computer technology training courses” (p. 78).

Ethics in a Legal Office

Zitrin, Langford, and Mohr (2005) expressed the need for lawyers to educate each member of their support staff on the need to maintain high ethical standards:

Lawyers generally employ assistants in their practice, including secretaries, investigators, law student interns, and paraprofessionals. Such assistants, whether employees or independent contractors, act for the lawyer in rendition of the lawyers’ professional services. A lawyer must give such assistants appropriate

instruction and supervision concerning the ethical aspects of their employment, particularly regarding the obligation not to disclose information relating to representation of the client and should be responsible for their work product. The measures employed in supervising nonlawyers should take account of the fact that they do not have legal training and are not subject to professional discipline (p. 105).

Confidentiality, dependability, discretion, and loyalty are essential traits of the legal secretary (Barclay, 1950; Blackburn, 1981; McLaughlin, 1965; Mitchell, 1999; Ward, 1974). Attorneys are constantly dealing with extremely confidential matters. In order for the law firm to flourish, trust must be developed and maintained among the client, attorneys, and members of the legal support staff. As McCutcheon (2005) stated:

Perhaps what sets lawyers apart from other professionals in terms of ethics, however, is that lawyers owe ethical duties not just to clients, but to the courts or other tribunals, to the public, and to fellow members of the legal profession (p. 27).

For nearly a century, the American Bar Association has expected lawyers to abide by specific ethical standards. The Canons of Professional Ethics were first adopted in 1908 and revised in 1969 as the Code of Professional Responsibility and Code of Judicial Ethics. The current standards, referred to as the Model Rules of Professional Conduct, were adopted in 1983. Lawyers may be disciplined or disbarred if these rules are not followed (NALS, 2001). “I believe most bosses today want their employees to feel accountable for their own actions. They champion the ethical atmosphere in the

workplace, and recognize this can be accomplished only by employees embracing their own accountability” (DeMars, 2006, p. 22).

The legal secretary and every other legal support staff member employed in a law firm should be familiar with all national, state, and local rules as the lawyers are ultimately responsible for the actions of each employee (NALS, 2001). In order to promote professionalism and avoid misconduct among its membership, NALS has adopted a Code of Ethics & Professional Responsibility:

Members of NALS are bound by the objectives of this association and the standards of conduct required of the legal profession. Every member shall:

- Encourage respect for the law and the administration of justice;
- Observe rules governing privileged communications and confidential information;
- Promote and exemplify high standards of loyalty, cooperation, and courtesy;
- Perform all duties of the profession with integrity and competence; and
- Pursue a high order of professional attainment (What’s New @ NALS, 2007, p. 5).

The importance of the NALS members abiding by this Code was expressed by the 2004–2005 President, Mary Burns (2004):

For over 75 years, the members of NALS have embraced the ethical foundations and visionary commitments that have enabled us to grow and develop into the tremendous legal professional team members of today. Kudos to those of yesteryear, who had the foresight to acknowledge that the career of the legal professional would not be an easy one (p. 32).

Information Technology and Legal Secretaries

Several factors have directly impacted the evolution of the duties of the legal secretary in the past 100 years: growth in the number and size of law firms, explosion of technology, and increased reliance on paralegals (Murphree, 1981, p. 47–8). However, the introduction and expansion of computerized technology in law offices has prompted an extensive transformation in job characteristics required for success as a legal secretary.

Murphree (1981) describes the experiences one large Wall Street law firm encountered when computerized equipment was originally introduced. In 1974 the firm attempted to use a word processing system but discovered it was very inefficient and often needed repair. In 1976, using a computer-trainer to advise them, the firm spent approximately \$250,000 for a state-of-the-art text editing system.

Within three or four years, after several refinements had been made, the following equipment was being used: “an optical character reader (‘Scanner’); two redundant computers, each with separate log and memory units; six ‘concurrent’ visual display stations, a high-speed printer and a low-speed printer” (Murphree, 1981, p. 166). The high-speed printer produced eight pages per minute while the low-speed printer produced one-half page each minute.

The word processing department was for the most part centralized with a staff of approximately nine employees. Quite often the legal secretary was responsible for producing the draft document using a Selectric typewriter, which was then electronically entered into the computer.

The document would then be transferred to the word processing department for editing, proofreading, and revision. This text-editing system was capable of automatic

hyphenation, global search and replace, and boilerplate insertion. The final draft would be sent directly to the attorney. Electronic copies of completed documents were “transferred from disc to tape and stored as a permanent archive in the word processing library” (Murphree, 1981, p. 169).

Blackburn (1981) also reported that nationally the legal secretary was transcribing from pre-recorded dictation using memory typewriters and saving the text on a recording card or tape. “Electronic data processing systems and computers are an integral part of the society” (p. 44).

The introduction of computerized technology had an immediate and permanent effect on the job characteristics of the legal secretary, and the changes that have been encountered since that time have redefined the roles of attorneys and legal support staff. “Change is coming faster than ever before and the pace of change will continue to accelerate. . . . The once predictable and stable law firm environment is a thing of the past” (Mitchell, 1999, p. viii). “Raw secretarial skills, like typing speed, are much less important in a law office properly using technology. The ability to think is far more important” (Beckman & Hirsch, 2004, p. 56).

At the beginning of the twenty-first century, the current and future role of the legal secretary is in a state of flux. Tasks commonly performed in the past are no longer necessary. Computerized word processing has eliminated the need for repetitive typing and retyping of correspondence and legal documents. Expert shorthand skills are unnecessary as dictation is now recorded on cassettes for future transcription. Legal research that required a complete law library can now be completed much more quickly using Internet resources or CD-ROMs (Mitchell, 1999).

Today's legal secretary is expected to possess a plethora of new skills including administrative and managerial abilities, working as part of a team, and dealing successfully with individuals from various countries and cultures.

But now legal staffs and clients that are dispersed across the U.S. and overseas can work together by accessing documents on extranet-based knowledge management systems. Such extranets give clients a window into billing, transactions, calendaring, depositions and pleadings (Consilvio, 2003, p. 43).

Change has even occurred in the job title. The legal secretary may now be referred to as a lawyer's assistant or legal assistant. Mitchell (1999) has even proposed using client service coordinator when referring to the legal secretary.

The shortage of highly skilled legal secretaries continues (Denney, 2002; Mitchell, 1999; Ward, 1974). Jane Sanders, co-owner of Legal Resources in Jackson, Mississippi, has stated that in the past 18 months, "It is beyond difficult to find good legal secretaries" (Gillette, 1998). The Association of Legal Administrators (ALA) surveyed members in Washington, D.C., Pennsylvania, and Nebraska. This study determined that there is a shortage of competent legal secretaries and that there is a "significant change-in-process. This change must be recognized: the evolution of the 'legal secretary'" (Mitchell, 1999, p. 1).

This evolution was brought about due to technological advancement and increased client demand for quality legal services at a reasonable price. The twenty-first century legal secretary will find that the "role will continue to be redirected from a career centered around document production towards a career in which time and project

management, together with increased knowledge of technology, are more critical” (Mitchell, 1999, p. iii.). Several innovations have greatly influenced this role.

In the past few years, voice recognition technology has become easier to use and has gained in popularity. The legal secretary is faced with the uncertainty of how this technology will impact the profession. Attorneys now have the capability to access information stored on their office computers from remote sites and are keyboarding and distributing many of their own documents (Mitchell, 1999). Steps must be taken to protect confidential information.

Technology has allowed companies and individuals to carry large amounts of data in their traditional form, such as their corporate network or individual PC, but the latest technology, such as portable storage devices (memory sticks), as well as mobile e-mail devices, (Blackberry, Palm devices) has raised the concern level of business owners, managers, and professionals around the globe (Haluschak, 2005-6, p. 30).

An explosion of new software designed specifically for legal offices has occurred in the past decade. The attorney, legal secretary, and paralegal alike face the challenge of attempting to determine which software applications will improve the efficiency of their offices, purchasing and installing them, and then mastering their use. These software applications include case management, calendaring/docketing, document assembly, litigation presentation, computer-assisted legal research, document management, real-time translation, electronic document filing, document imaging, litigation support, time and billing, and accounting software applications. Consideration must also be given to using an Application Service Provider (ASP) (Mitchell, 1999).

History of Paralegals

Paralegals have the authority to perform any task that attorneys can do “as long as it is done under the *direct supervision* of the lawyer, except represent a client in court, give legal advice, set fees, and accept cases” (NALS, 2000, p. 4). While the attorney and legal secretary can easily trace the development of their professions through past generations, paralegals—or legal assistants—do not yet have this capability since they did not become part of the legal support staff until the 1960s. Biggs (2006) states, “lawyers began using semiprofessional support staff to increase their own productivity and income. Legal secretaries began performing paralegal-type functions in addition to their clerical tasks. As they assumed greater paraprofessional tasks, the paralegal profession was born” (p. 39). By the end of the 1960s, the American Bar Association (ABA) had established the Special Committee on Legal Assistants that is still in existence today. This committee has authority over the training, education, and use of paralegals (Harrison, 1999).

By continually monitoring trends in the legal profession, the committee members develop and revise the standards by which existing paralegal training programs are evaluated. Those programs that meet or exceed the guidelines for quality paralegal education then receive ABA-approved certification. Graduates of these programs are highly trained professionals who can assist attorneys in providing the public with affordable quality legal services (Harrison, 1999).

By the 1970s, the ABA was holding conferences for paralegal educators. The American Association for Paralegal Education (AAfPE) was organized in 1981 and has as its main goal the promotion of high standards for paralegal education. Myers (2001)

reports that the organization believes that in order to protect the profession, minimal educational standards need to be set. Currently, paralegal degree programs include associate, baccalaureate, baccalaureate with paralegal minor, post-secondary degree certification, and master's degree (Harrison, 1999).

Harrison (1999), studying the changing needs of the legal profession, recommended that postsecondary paralegal educators evaluate and adapt their curriculum. "Because the law is becoming so specialized, and nontraditional, education must respond to address the needs of society" (p. 178). One challenge facing this profession is the appropriate job title to use.

It's not just the attorneys who are confused about the role of paralegals. Those in the profession still grapple with the definition and distinction between the terms 'paralegal' and 'legal assistant'. . . . Those both inside and outside the profession have moved toward the terms that make the most sense to them. As a result, some firms use their own definition of paralegal and legal assistant (Hughes, 2004, p. 60).

When paralegals were surveyed in 2006, "an overwhelming 94 percent of respondents said 'paralegal' denotes a higher professional status than 'legal secretary'" (Vuong, 2006, p. 16). The paralegal profession has experienced tremendous growth since its inception. Phillips (1978) found that attorneys were employing paralegals in their offices and were expecting to hire additional ones. While Mitchell (1999) stated that paralegals are in high demand, Harrison (1999) noted fewer students were enrolling in paralegal training programs. By 2002, Denney reported that a shortage of paralegals exists.

Job Skills Needed by Paralegals

Both the attorney and legal secretary have found that their job responsibilities have changed since the paralegal has become an integral part of the legal team.

“Expanding legal services to better serve the needs of clients is a primary focus of the paralegal profession” (Biggs, 2006, p. 55). In order to be successful in their respective professions, the legal secretary and paralegal now share many job skills and traits.

Waldman (1997) recommended that paralegals possess clerical/secretarial skills such as keyboarding and computer competency since smaller law firms—with 20 or fewer attorneys—still require the paralegal to perform these duties.

One of the most important paralegal traits is the need for high ethical standards. Professional paralegal associations have developed their own codes of ethical conduct just as NALS has done for the legal secretary. Biggs (2006) surveyed individuals who graduated from an American Bar Association (ABA) accredited paralegal program at one Southern California community college between 2002 and 2005. This study found that there is “the perceived need for additional instruction in personal ethics. Professional ethics is covered at length in ABA [American Bar Association] approved paralegal programs. However, survey results support the need for additional instruction in personal ethics” (p. 115)

A new challenge facing the paralegal profession is whether disbarred attorneys should be employed at paralegals. Young (a Product Compliance Analyst) and Foster (a Senior Paralegal) (2005) feel that this practice is quite acceptable:

There are many reasons an attorney might be suspended or disbarred, and not all of them have to do with their competency as an attorney or their work ethic. . . .

Every nonattorney employee who works under the supervision of an attorney, including clerks, secretaries, paralegals, legal assistants and the person answering the telephone, is responsible only to his or her supervising attorneys. Those attorneys ultimately are legally and ethically responsible for the actions of their employees (p. 12).

Conversely, a 2006 survey of paralegals found that many felt the profession would be degraded by allowing disbarred attorneys to work in legal offices. Flatten (2006) states:

. . . 66.9 percent of respondents said disbarred attorneys should not be allowed to work as paralegals. Twenty-five percent disagreed stating that disbarred attorneys should be able to work as paralegals, and 8.1 percent think they should be able to work as paralegals, except under specific circumstances (p. 16).

One paralegal professional organization wants the public to be informed about this practice. Anderson (2005) writes:

Since the Fall of 2004, the National Federation of Paralegal Associations has offered a database through its Web site that includes the names of disbarred attorneys working as paralegals in each state. . . . Whether disbarred or suspended attorneys are able to work as paralegals is at the discretion of each state, since the federal government, the American Bar Association and other legal organizations have no authority to tell state bar associations what to do (p. 28).

It appears this practice will continue to stimulate further debate.

Lifelong learning is also a useful attribute for paralegals. As the president of the AAFPE states, “Without education, legal assistants [paralegals] lack a major element that

comprises a profession—lifelong learning” (Myers, 2001, p. 36) and Biggs (2006) concurs. “As the role of paralegals continues to progress, paralegals will need to upgrade their knowledge and skills” (p. 73). Smith (2001) stated that paralegals must be flexible, possess technological skills, and be interested in maintaining and improving the profession.

Job characteristics shared by the legal secretary and paralegal include maintaining client files, possessing knowledge of the American legal system, and drafting correspondence. Occasionally both the legal secretary and paralegal will maintain a law library and perform payroll or other accounting tasks (Blondefield, 1984; Broadway, 1988; Harrison, 1999; Latham, 1980; NALS, 2001; National Association of Legal Assistants, Inc., 1992).

The National Association of Legal Assistants (NALA) has conducted biennial surveys of their membership since 1986. Selected findings from paralegals (or legal assistants) found that:

in the area of workplace responsibilities, the top five duties indicated by respondents to the 2002 survey were drafting correspondence, assisting with clients, calendaring deadlines, general factual research, and drafting pleadings, document responses, and discovery. Legal assistants also spend a good deal of time on office matters, automation systems/computerized support, and case management (Breaking News, 2002, p. 40).

Latham (1980) surveyed three groups—lawyers, legal secretaries, and paralegals—and found that each group “indicated a distinctive difference in the tasks performed by paralegals and tasks performed by legal secretaries” (p. 96). Several areas

of specialization include business/corporate, family law, bankruptcy, criminal or civil law, probate and estate planning, real estate, environmental, government, labor law, medical malpractice, personal injury, and tax law.

Trained paralegals, working under the supervision of attorneys, perform many tasks that the legal secretary does not. They are expected to possess expert legal writing and research skills since they will draft numerous legal documents. After interviewing clients and potential witnesses, paralegals may draft summaries of this testimony.

Paralegals are also called upon to perform legal research using books, CD-ROMs, and the Internet as well as filing documents with various courts, (Harrison, 1999; Latham, 1980; National Association of Legal Assistants, Inc., 1992; Phillips, 1978). “Only one in three attorneys utilizes a paralegal’s skill in legal research and writing” (Harrison, 1999, p. 70).

Summary

A review of the history of business education in the United States has shown that two things have remained constant. Through the centuries, business educators have successfully dealt with change, and they have relied upon relevant research findings to guide them as decisions are made regarding curricular improvements.

A wealth of valuable information has been obtained through research of general secretarial employees, and some of these findings can also be applied to legal secretaries. Numerous skills, though, are specific to the legal office, and improvements in the legal secretarial curriculum cannot be made based solely on findings obtained from general secretaries. In order to most accurately assess legal office job competencies, research needs to be performed using members of the legal support staff. Historically, the extent of research in this field is scarce.

III. METHODS

Introduction

This study was designed to identify the current job competencies of legal secretaries and paralegals throughout the United States as perceived by selected members of *NALS . . . the association for legal professionals* (NALS). These competencies were grouped into the following categories: personal, communication, office, computer, and information processing.

The findings of this study will be used for curricular development in the associate degree program, Legal Office Systems, and the bachelor's degree program, Legal Office Administration, at Pensacola Christian College in Pensacola, Florida. Additionally, the NALS Board of Directors will receive a complete report of the findings obtained from this study to assist them as they continue to furnish up-to-date information to their membership. Improving the professional development of its members has been at the core of this organization since its inception in 1929.

Auburn University's Institutional Review Board for Research Involving Human Subjects (IRB) granted approval for this study. Appendix A contains a copy of the approval memorandum.

Participants

Permission was granted by the NALS Board of Directors to survey its 5,601 members (Appendix B). Participants were chosen using a 10% random sample, from each of eight regions, for a total of 564 members. The software application Statistical Package for the Social Sciences for Windows (SPSS) was used to generate the 10% sample.

Validity and Reliability

Whenever research is being conducted, ensuring the validity of the findings is a primary consideration. Fraenkel and Wallen (2000) state:

Validity is the most important idea to consider when preparing or selecting an instrument to use. More than anything else, researchers want the information they obtain through the use of an instrument to serve their purposes In recent years, validity has been defined as referring to the appropriateness, meaningfulness, and usefulness of the specific inferences researchers make based on the data they collect. Validation is the process of collecting evidence to support such inferences. (p. 169)

A review of related literature identified a deficiency in current research specific to legal secretaries and paralegals. The researcher also examined numerous survey instruments that had been used in similar research studies. By utilizing this information, a survey instrument was developed that consisted of 14 demographic questions, 45 job tasks organized into five competencies, and 8 computer software application questions. During this process, steps were taken to ensure the content validity of the survey instrument using panels of experts.

After the survey instrument was approved by the researcher's doctoral committee, the revised survey was administered to two panels of experts. The survey instrument was originally administered to selected faculty members in the Business Division and administrators at Pensacola Christian College. The survey instrument was revised to reflect their input and then administered to selected faculty members in the paralegal program at Pensacola Junior College. A final draft of the survey instrument was prepared based upon the suggestions from these panels of experts.

In quantitative research, reliability "is the consistency of the instrument in measuring whatever it measures. Reliability coefficients can take on values of 0 to 1.0 inclusive. . . . Clearly, in educational measurement, it is desirable to obtain high reliability coefficients, although coefficients of 1.0 are very rare indeed" (Wiersma & Jurs, 2005, p. 324). Statistical analyses using Cronbach's Alpha (α) were performed to determine the reliability of each of the five categories of job characteristics included on the survey instrument. Wiersma and Jurs (2005) define Cronbach's Alpha as "an internal consistency or reliability coefficient for a test, based on two or more parts of the test but requiring only one test administration" (p. 488). These reliability findings include Personal Competencies, $\alpha = .73$, $n = 8$ items; Communication Competencies, $\alpha = .78$, $n = 8$ items; Office Competencies, $\alpha = .75$, $n = 8$ items; Computer Competencies, $\alpha = .85$, $n = 13$ items; and Information Competencies, $\alpha = .79$, $n = 8$ items. For an instrument to be considered reliable, it should achieve an alpha of .70 or better. The alpha obtained for this instrument achieved acceptable levels for research purposes.

Components of the Survey

The first section of the survey instrument included the purpose of the study and the deadline for returning the completed survey instrument. Since the study was designed to obtain data from both legal secretaries and paralegals, a definition of each occupation was included in this section.

The next section consisted of 14 demographic questions including main job responsibility, NALS region, educational levels, professional certifications currently held, professional certifications to be obtained in the future, hours worked each week as a legal secretary and/or paralegal, years worked in the legal field, types of computers used, the size and type of law firm, and the perceived shortages, if any, of legal secretaries and paralegals.

The following section was composed of 45 job tasks organized into five competencies: personal, communication, office, computer, and information processing. Respondents used a four-point Likert-type scale to rate their perceptions of the importance of each job competency based upon their personal experience. The scale was organized where 4 represented *absolutely essential*, 3 was *very important*, 2 was *somewhat important*, and 1 was *not important*.

The last section listed eight computer software applications, and respondents were asked to identify those they used on a weekly basis. These software applications included word processing, presentation, desktop publishing, case management, calendaring/docketing, time and billing, and voice recognition as well as the online research service or services they used.

Instrument Mailing

A local bulk mailing firm was selected to print all of the items and conduct the mailings. (Appendix C) The researcher supplied the names and addresses of the 564 randomly selected participants.

An initial postcard was mailed informing selected NALS members that they had been chosen to participate in a national study and that the researcher had received permission from the NALS Board of Directors to contact them (Appendix D). One week later, the initial information letter as required by IRB (Appendix E), survey (Appendix F), and pre-addressed business reply return envelope were mailed to each participant.

Approximately one week later, a second postcard was mailed to all participants. The purpose of this postcard was twofold: thanking those respondents who had already mailed their completed surveys and reminding the others of the deadline for returning theirs. (Appendix G) A follow-up mailing was sent consisting of a follow-up information letter (Appendix H), survey (Appendix F), and pre-addressed business reply return envelope. No further attempt was made to contact those individuals who did not respond to the follow-up mailing.

Data Analysis

The Statistical Package for Social Science for Windows (SPSS) was used for data analysis. Descriptive statistics were computed on selected demographic information obtained from legal secretaries and paralegals—educational levels, ages, types of computers used, professional certifications, types of law firms in which respondents work, number of attorneys in the firms in which respondents work, number of people to

whom respondents are responsible, hours worked as legal secretaries and/or paralegals, and perceived shortages of legal secretaries and paralegals.

To analyze Research Question 1, multivariate analysis of variance (MANOVA) tests were performed on the findings obtained from the five groups of 45 job competencies: 8 personal job competencies, 8 communications job competencies, 8 office job competencies, 13 computer job competencies, and 8 information job competencies. “A one-way MANOVA tests the hypothesis that the population means for the dependent variables are the same for all levels of the factor, that is across all groups” (Green, Salkind, & Akey, 1997, p. 240).

Wilkes Lambda was used as the omnibus test, and the analysis of variance (ANOVA) was used as univariate follow-up tests to determine which job competencies were significantly different based upon the results obtained from legal secretaries and paralegals. “The most popular follow-up approach is to conduct multiple ANOVAs, one for each dependent variable” (Green, Salkind, & Akey, 1997, p. 240). Effect size (η^2) was also computed. “Effect size is a numerical way of expressing the strength or magnitude of a reported relationship, be it causal or not. . . . Effect size is expressed as a decimal number and, while numbers greater than 1.00 are possible, they do not occur very often” (Gay & Airasian, 2003, p. 294). “In general, η^2 is interpreted as the proportion of variance of the dependent variable that is related to the factor. Traditionally, η^2 values of .01, .06, and .14 represent small, medium, and large effect sizes respectively” (Green, Salkind, & Akey, 1997, p. 193).

To analyze Research Question 2, a chi-square test was conducted to determine if legal secretaries and paralegals differed in their use of software applications and online

legal research services. Chi-square is “a nonparametric test of significance appropriate when the data are in the form of frequency counts; it compares proportions actually observed in a study with proportions expected to see if they are significantly different” (Gay & Airasian, 2003, p. 586).

To analyze Research Question 3, both chi-square and ANOVA tests were used. Three chi-square tests were conducted to ascertain whether legal secretaries and paralegals differed in obtaining professional certification, in the type of law firms in which they are employed, and in the regions in which they live. Additionally, an ANOVA test was performed to determine if any differences exist between legal secretaries and paralegals and the number of years in which they have worked in legal offices. Effect size was also calculated.

Summary

In this national study, a survey instrument developed by the researcher was mailed to a 10 percent random sample—or 564—members of *NALS . . . the association for legal professionals* (NALS). Using SPSS software, a variety of statistical analyses were conducted—MANOVA, ANOVA, chi-square, and descriptives.

IV. STATISTICAL ANALYSIS AND RESULTS

Introduction and Statement of the Problem

This study sought to determine the perceived level of importance qualified legal secretaries and paralegals placed on selected job competencies based upon their experience in a legal office. The research further identified the extent to which selected software applications are used by legal secretaries and paralegals. The research problem was to identify the job competencies required for employment as a legal secretary or paralegal as perceived by selected members of *NALS . . . the association for legal professionals*.

Participants

The participants for this national study consisted of 5,601 members of NALS . . . the association for legal professionals (NALS). Participants were randomly chosen from each of eight geographical regions using the Statistical Package for the Social Sciences for Windows (SPSS) to obtain a 10% random sample. Five names were removed from the population list before the random sample was selected: four members with international addresses and the researcher, who is a member in Region 4. The random sample was obtained from the remaining 5,595 members.

A total of 564 NALS members were contacted, and 209 valid survey instruments were returned for a 37.06% response rate. Table 1 illustrates the participation from each region. The usable survey instruments received from each region were Region 1,

13 (41.94%); Region 2, 21 (39.62%); Region 3, 27 (40.91%); Region 4, 28 (30.77%); Region 5, 29 (51.79%); Region 6, 41 (31.54%); Region 7, 33 (41.25%); and Region 8, 17 (29.83%). Region 5, consisting of the states of Iowa, Kansas, Minnesota, Nebraska, North Dakota, South Dakota, and Wisconsin, had the highest percentage of return. Region 8, which includes the states of Arizona, California, Colorado, Hawaii, Nevada, New Mexico, and Utah, had the lowest rate of return.

Table 1

Responses of NALS Members by Region

| Region | Population | Mailed | Received | % Received |
|------------------------------------------|------------|--------|----------|---------------|
| Region 1 (CT, ME, MA, NH, NY, RI, VT) | 318 | 31 | 13 | 41.94 |
| Region 2 (DC, DE, MD, NJ, PA, VA) | 603 | 53 | 21 | 39.62 |
| Region 3 (IL, IN, KY, MI, OH, WV) | 582 | 66 | 27 | 40.91 |
| Region 4 (AL, FL, GA, NC, SC, TN) | 901 | 91 | 28 | 30.77 |
| Region 5 (IA, KS, MN, NE, ND, SD, WI) | 430 | 56 | 29 | 51.79 |
| Region 6 (AR, LA, MO, MS, OK, TX) | 1,443 | 130 | 41 | 31.54 |
| Region 7 (AK, ID, MT, OR, WA, WY) | 794 | 80 | 33 | 41.25 |
| Region 8 (AZ, CA, CO, HI, NV, NM, UT) | 524 | 57 | 17 | 29.83 |
| Totals | 5,595 | 564 | 209 | 37.06 |

Demographics

Main job responsibilities. When the National Association of Legal Secretaries was formed in 1929, the membership consisted exclusively of legal secretaries. Through the years, lawyers, judges, educators, paralegals, and other legal office support staff joined the organization. In order to reflect this diversity, in 1999 the organization became NALS . . . the association for legal professionals (NALS, 2001, p. 15). This variety was reflected in the responses received as 110 (52.6%) chose legal secretary; 60 (28.7%) paralegal; 9 (4.3%) postsecondary educator; 7 (3.3%) office manager; 2 (1.0%) secondary educator; 2 (1.0%) lawyer; 1 (0.5%) file clerk; and 1 (0.5%) receptionist.

The remaining 17 (8.1%) classified their profession as “Other.” Two respondents (1.0%) listed their job title as administrative assistant and two others (1.0%) as legal recruiter. The remaining job titles were listed only once (0.5%). They were aide to municipal lobbyist, bailiff in municipal court, deputy clerk, human resources director, insurance/bonds employee, information technology (IT) help desk coordinator, IT technical support, judicial administrator, legal placement specialist, program assistant in higher education, secretarial manager, community center secretary, and trial court assistant.

Educational levels. Of the total 209 respondents, 89 (42.6%) reported receiving some type of college and/or vocational-technical training, 44 (21.1%) a two-year associate degree, 28 (13.4%) a bachelor’s degree, 27 (12.9%) no additional education after high school, and 4 (1.9%) master’s degree. Seventeen (8.1%) listed their educational level as “Other.” Eight (3.8%) indicated they had received their Juris Doctor (J.D.). The

following educational levels were listed only once (0.5%): law school, paralegal course, Ph.D., some graduate work, specialist degree, and three years of college.

The educational levels specified by legal secretaries and paralegals are presented in Table 2. There were 94 (85.5%) legal secretaries and 53 (88.3%) paralegals who stated they had obtained training above the high school level.

Table 2

Educational Levels for Legal Secretaries and Paralegals

| Educational level | Legal secretary | | Paralegal | |
|-----------------------------------------------|-----------------|--------|-----------|--------|
| | <i>f</i> | % | <i>f</i> | % |
| High school | 16 | 14.55 | 7 | 11.67 |
| Some college or vocational/technical training | 51 | 46.36 | 27 | 45.00 |
| Two-year associate degree | 27 | 24.55 | 13 | 21.67 |
| Bachelor's degree | 11 | 10.00 | 9 | 15.00 |
| Master's degree | 1 | 0.91 | 0 | 0.00 |
| Other | 2 | 1.82 | 3 | 5.00 |
| Missing | 2 | 1.82 | 1 | 1.67 |
| Totals | 110 | 100.00 | 60 | 100.00 |

Two (1.8%) legal secretaries listed their educational level as “Other.” One (0.9%) indicated having acquired some graduate work, and one (0.9%) reported receiving a specialist degree. Three (5.1%) paralegals listed their educational level as “Other.”

One (1.7%) reported having completed a paralegal course, one (1.7%) three years of college, and one (1.7%) a doctorate (Ph.D.).

The respondents were also asked if they had obtained a paralegal degree from a college or university. Of the legal secretaries who responded: 96 (87.3%) had not obtained a paralegal degree, while 8 (7.3%) reported obtaining an associate paralegal degree, 1 (0.9%) a four-year paralegal degree, and 3 (2.7%) did not respond.

The findings obtained from paralegals were similar: no paralegal degree, 39 (65.0%); one-year paralegal diploma, 11 (18.3%); associate paralegal degree, 7 (11.7%); post-secondary paralegal degree, 2 (3.3%); and did not respond 1 (1.7%).

Age. As respondents completed the survey, they were asked to select one of eight job categories that best described their main job responsibility. These results are shown in Table 3. Of the 192 (91.9%) individuals who selected one of these eight main job categories, the youngest reported age was 20 while the oldest reported ages were 71, 73, 74, and 79. The remaining 17 (8.1%) respondents selected Other as their main job responsibility. Of the 110 legal secretaries, 6 (5.4%) were between 18–29; 17 (15.5%) between 30–41; 53 (48.2%) were between 42–53; 28 (25.5%) were between 54–65; and 6 (5.4%) were over 65. Of the 60 paralegals, 3 (5.0%) were between 18–29; 20 (33.3%) between 30–41; 20 (33.3%) were between 42–53; 13 (21.7%) were between 54–65; and 4 (6.7%) were over 65.

Table 3

Ages of Selected Respondents

| Job title | 18-29 | 30-41 | 42-53 | 54-65 | Over 65 | Totals |
|------------------------|-----------|-------------|-------------|-------------|------------|---------------|
| Legal secretary | 6 5.4% | 17 15.5% | 53 48.2% | 28 25.5% | 6 5.4% | 110 100.0% |
| Paralegal | 3 5.0% | 20 33.3% | 20 33.3% | 13 21.7% | 4 6.7% | 60 100.0% |
| Secondary educator | 0 | 1 50.0% | 1 50.0% | 0 | 0 | 2 100.0% |
| Postsecondary educator | 0 | 3 33.3% | 4 44.4% | 1 11.1% | 1 11.1% | 9 100.0% |
| Lawyer | 0 | 0 | 1 50.0% | 1 50.0% | 0 | 2 100.0% |
| Office manager | 0 | 0 | 3 42.9% | 4 57.1% | 0 | 7 100.0% |
| File clerk | 0 | 0 | 1 100.0% | 0 | 0 | 1 100.0% |
| Receptionist | 0 | 0 | 1 100.0% | 0 | 0 | 1 100.0% |

Gender. Of the 209 valid surveys received, 205 (98.1%) had selected female and 4 (1.9%) male. One (0.9%) legal secretary had chosen male while the remaining 109 (99.1%) had selected female. One (1.7%) paralegal had chosen male while the remainder, 59 (98.3%), had designate female.

Types of computers used. IBM-compatible computers (PCs) were used by nearly all the respondents as 200 (95.7%) reported using PCs only, 3 (1.4%) both PCs and

Macintosh, 1 (0.5%) selected not applicable, and 5 (2.4%) did not respond. The responses of paralegals showed that 57 (95.0%) used PCs, 1 (1.7%) used both PC and Macintosh, and 2 (3.3%) did not respond. The responses of legal secretaries to this question were similar: 104 (94.5%) PCs, 2 (1.8%) both PCs and Macintosh, 1 (0.9%) not applicable, and 3 (2.7%) did not respond.

Professional Certifications of Legal Secretaries and Paralegals

The respondents were asked several questions regarding professional certifications they currently hold and if they plan to obtain any certifications in the future. Five certifications were identified on the survey: ALS—the basic certification for legal professionals; PLS—the advanced certification for legal professionals; CLA—Certified Legal Assistant, which is also known as Certified Paralegal (CP); CLA specialty certification (one or more); and CPS—Certified Professional Secretary. These findings are summarized in Table 4.

Table 4

Current Professional Certifications of Legal Secretaries and Paralegals

| Certifications | Legal secretary (n = 52) | | Paralegal (n = 42) | |
|--------------------------------------------------------|-----------------------------|-------|-----------------------|-------|
| | <i>f</i> | % | <i>f</i> | % |
| ALS—the basic certification for legal professionals | 13 | 19.7 | 6 | 11.3 |
| PLS—the advanced certification for legal professionals | 39 | 59.1 | 28 | 52.8 |
| Certified Legal Assistant/Certified Paralegal | 4 | 6.1 | 8 | 15.1 |
| Certified Legal Assistant Specialty | 1 | 1.5 | 1 | 1.9 |
| Certified Professional Secretary | 2 | 3.0 | 4 | 7.6 |
| Other professional certifications | 7 | 10.6 | 6 | 11.3 |
| Total certifications reported | 66 | 100.0 | 53 | 100.0 |

Note. Each respondent could select more than one certification. No professional certifications were reported by 58 (52.7%) of the legal secretaries and 18 (30.0%) of the paralegals.

Current professional certifications of legal secretaries. Among the 110 legal secretaries who participated in the study, 52 (47.3%) reported they currently have one or more professional certifications. Seven (6.4%) legal secretaries listed their professional

certification as “Other.” Two (1.8%) stated they hold Texas civil litigation certification and two (1.8%) paralegal certification. Three different certifications were each mentioned by one (0.9%) legal secretary: an associate degree in legal studies, a Bachelor of Science degree in legal administration, and certified electronic reporter.

Current professional certifications of paralegals. Among the 60 paralegals who participated in the study, 42 (70.0%) stated they have one or more professional certifications and 18 (30.0%) do not. Each respondent could select more than one certification (see Table 4). Six (10.0%) paralegals selected “Other” for their professional certification. Two (3.3%) stated they hold a paralegal certification. Four different certifications were each mentioned by one (1.7%) paralegal: California Certified Legal Secretary, professional investigator, Texas civil litigation, and Texas specialty certificate.

Planned professional certifications of legal secretaries. Nine (8.2%) legal secretaries reported they anticipate obtaining professional certification in the future. Four (3.6%) stated they plan to obtain their PLS certification. The following certifications were named by one (0.9%) legal secretary each: ALS, ALS and PLS, PLS and CLA, PLS and CPS. Forty-five (40.9%) indicated they do not plan to obtain certification in the future, and 56 (50.9%) did not respond.

Planned professional certifications of paralegals. Eight (13.3%) paralegals reported they expect to obtain professional certification in the future. Four (6.7%) stated they plan to obtain PLS certification. Each of the following certifications was designated by one (1.7%) paralegal: ALS, CLA, associate degree, and American Institute for Paralegal Studies. Ten (16.7%) indicated they do not plan to obtain certification in the future, and 42 (70.0%) did not respond.

Law Firms of Legal Secretaries and Paralegals

Types of law firms—legal secretaries. The respondents were asked to select the type of law firm that best describes the one in which they are employed. Legal secretaries selected private, 66 (60.0%); corporate, 26 (23.6%); and government, 3 (2.7%). Ten different law firm types were identified by one (0.9%) legal secretary: legal aid, civil litigation, complex class action, court system, defense litigation, estate planning and tax, litigation defense, public defender, staff counsel, and union. Three (2.7%) legal secretaries stated that this question was not applicable to their organization, and 2 (1.8%) did not respond.

Types of law firms—paralegals. Paralegals responded as follows: private, 44 (73.3%); corporate, 5 (8.3%); and government, 6 (10.0%). Two different law firm types were identified by one (1.7%) paralegal: intellectual property and personal injury. One (1.7%) paralegal stated that this question was not applicable, and 2 (3.3%) did not respond.

Number of attorneys in the firm. When asked to identify the number of attorneys employed by their firms, legal secretaries stated that 12 (10.9%) work in firms with one attorney; 57 (51.8%) have 2-50 attorneys; 19 (17.3%) have 51-110 attorneys; 9 (8.2%) have 111-170 attorneys; 7 (6.4%) have 171-230 attorneys; 1 (0.9%) has 231-350 attorneys, and 5 (4.5%) have 351 or more attorneys.

Paralegals reported that 14 (23.3%) work in firms with one attorney; 36 (60.0%) have 2-50 attorneys; 8 (13.3%) have 51-110 attorneys; and 2 (3.3%) have 171-230 attorneys.

Number of people to whom respondents are responsible. Thirty (27.3%) legal secretaries reported they are responsible to one person, 72 (65.5%) are responsible to 2-10 people, 1 (0.9%) is responsible to 11-25 people, and 7 (6.4%) are responsible to 26 or more people.

Twenty-one (35.0%) paralegals reported they are responsible to one person, 29 (48.3%) are responsible to 2-10 people, 3 (5.0%) are responsible to 11-25 people, and 7 (11.7%) are responsible to 26 or more people.

Work Experience of Legal Secretaries and Paralegals

Years worked. The number of years legal secretaries and paralegals acknowledged they have worked is contained in Table 5. Respondents were asked how many years they have worked at their present firm as well as the total number of years they have worked in a legal office. Seventy-seven (70.00%) of legal secretaries reported that they have worked at their present firm for ten or fewer years. Thirty-eight (34.55%) of the legal secretaries have worked in a legal office at least 11 to 20 years.

The response from paralegals was somewhat similar. Thirty-seven (61.67%) paralegals reported that they have worked at their present firm for ten or fewer years. Eighteen (30.00%) paralegals stated they have worked at least 21 to 30 years in a legal office.

Table 5

Years Worked in the Present Firm and Years Worked in a Legal Office

| Number of years | Legal secretary | | | | Paralegal | | | |
|-----------------|-----------------|--------|-------------|--------|--------------|--------|-------------|--------|
| | Present firm | % | Total years | % | Present firm | % | Total years | % |
| 1–10 | 77 | 70.00 | 19 | 17.27 | 37 | 61.67 | 11 | 18.33 |
| 11–20 | 17 | 15.45 | 38 | 34.55 | 12 | 20.00 | 16 | 26.67 |
| 21–30 | 7 | 6.36 | 29 | 26.36 | 7 | 11.67 | 18 | 30.00 |
| 31 or more | 4 | 3.64 | 14 | 12.73 | 1 | 1.67 | 12 | 20.00 |
| Did not respond | 5 | 4.55 | 10 | 9.09 | 3 | 5.00 | 3 | 5.00 |
| Totals | 110 | 100.00 | 110 | 100.00 | 60 | 100.00 | 60 | 100.00 |

Hours worked as a legal secretary and paralegal. Table 6 reveals the number of hours respondents stated they work each week. Twenty (33.3%) respondents who classified their main job responsibility as paralegal also reported that they performed legal secretarial duties. The number of hours paralegals perform legal secretarial duties is as follows: 4 paralegals (6.7%) spend 15 hours or less, 11 (18.3%) spend 16 to 30 hours, and 5 (8.3%) spend 31 to 40 hours. Thirteen (11.8%) legal secretaries stated they also perform some paralegal duties. The number of hours legal secretaries perform paralegal tasks is as follows: 7 (6.4%) legal secretaries spend 15 hours or less, 4 (3.6%) spend 16 to 30 hours, and 2 (1.8%) spend 31 to 40 hours.

Table 6

Hours Worked Per Week Performing Legal Secretarial and Paralegal Duties

| Duties | 15 or less | % | 16 to 30 | % | 31 to 40 | % | 41 or more | % | N/A | % |
|---------------------------|------------------|-------|----------------|-------|----------------|-------|---------------|-------|-----|-------|
| Legal secretary (n = 110) | | | | | | | | | | |
| Legal secretary | 1 | 0.91 | 16 | 14.55 | 73 | 66.36 | 17 | 15.45 | 3 | 2.73 |
| Paralegal | 7 | 6.36 | 4 | 3.64 | 2 | 1.82 | 0 | 0.00 | 97 | 88.18 |
| Other | 8 | 7.27 | 1 | 0.91 | 0 | 0.00 | 0 | 0.00 | 101 | 91.82 |
| Paralegal (n = 60) | | | | | | | | | | |
| Legal secretary | 4 | 6.67 | 11 | 18.33 | 5 | 8.33 | 0 | 0.00 | 40 | 66.67 |
| Paralegal | 9 | 15.00 | 8 | 13.33 | 28 | 46.67 | 10 | 16.67 | 5 | 8.33 |
| Other | 4 | 6.67 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 56 | 93.33 |

Shortages of Legal Secretaries and Paralegals

Legal secretaries. Thirty-six (32.7%) legal secretaries stated they perceive that their region has a shortage of qualified legal secretaries while 42 (38.2%) stated they do not. One (0.9%) legal secretary stated there is a shortage of qualified support staff, and one (0.9%) reported a shortage of qualified trainers. Thirty-two (29.1%) legal secretaries did not respond to this question.

When asked if they perceive there is a shortage of qualified paralegals in their region, legal secretaries responded as follows: yes, 19 (17.3%); no, 29 (26.4%); and 61 (55.5%) did not respond.

Paralegals. Twenty-one (35.0%) paralegals stated they perceive there is a shortage of qualified paralegals in their region, and 17 (28.3%) responded they do not. One (1.7%) paralegal reported a shortage of qualified receptionists. Twenty-two (36.7%) paralegals did not respond to this question.

When asked if they perceive there is a shortage of qualified legal secretaries in their region, paralegals responded as follows: yes, 30 (50.0%); no 12 (20.0%); and 18 (30.0%) did not respond.

Job Competencies With The Highest Means

A comparison was made of those tasks that both legal secretaries and paralegals classified as *Absolutely Essential* (4) and *Very Important* (3). Table 7 consists of eleven job skills with a mean of 3.45 and above for *both* legal secretaries and paralegals.

Possessing high ethical standards was selected as the most important job skill among both legal secretaries ($M = 3.92$) and paralegals ($M = 3.95$). The second most important job skill was identified by legal secretaries ($M = 3.85$) and paralegals ($M = 3.92$) as possessing effective grammar, spelling, and punctuation skills. Legal secretaries ranked working well as a team member ($M = 3.79$) as the third most important job skill while paralegals selected upgrading skills as technology changes ($M = 3.75$).

Table 7

Job Competencies With the Highest Means

| Job competencies | Legal secretary | | | Paralegal | | |
|-------------------------------------------------------------|-----------------|----------|-----------|-----------|----------|-----------|
| | <i>M</i> | <i>f</i> | <i>SD</i> | <i>M</i> | <i>f</i> | <i>SD</i> |
| Possess high ethical standards | 3.92 | 109 | .31 | 3.95 | 60 | .22 |
| Possess effective grammar, spelling, and punctuation skills | 3.85 | 109 | .36 | 3.92 | 60 | .28 |
| Work well as a team member | 3.79 | 109 | .43 | 3.67 | 60 | .51 |
| Upgrade skills as technology changes | 3.69 | 109 | .50 | 3.75 | 60 | .51 |
| Use word processing software | 3.75 | 108 | .51 | 3.54 | 59 | .60 |
| Keyboard with accuracy | 3.74 | 109 | .46 | 3.67 | 60 | .51 |
| Organize and maintain a filing system | 3.69 | 107 | .52 | 3.65 | 60 | .58 |
| Compose letters and memoranda | 3.57 | 109 | .53 | 3.70 | 60 | .46 |
| Maintain a professional appearance | 3.55 | 109 | .59 | 3.45 | 60 | .62 |
| Keyboard documents | 3.50 | 103 | .71 | 3.35 | 60 | .64 |
| Possess a comprehensive legal vocabulary | 3.45 | 108 | .60 | 3.53 | 59 | .57 |
| Possess effective speaking skills | 3.45 | 109 | .71 | 3.53 | 60 | .65 |

Note. Based on a Likert-type scale: 4—*Absolutely Essential*, 3—*Very Important*, 2—*Somewhat Important*, and 1—*Not Important*.

Job Competencies With The Lowest Means

Table 8 lists the ten job skills that were classified as *Somewhat Important* (2) or *Not Important* (1). The task with the lowest mean as identified by legal secretaries was designing and/or maintaining an Internet web site ($M = 1.51$) while paralegals selected using voice recognition software ($M = 1.51$).

Table 8

Job Competencies With the Lowest Means

| Job competencies | Legal secretary | | | Paralegal | | |
|------------------------------------------------|-----------------|----------|-----------|-----------|----------|-----------|
| | <i>M</i> | <i>f</i> | <i>SD</i> | <i>M</i> | <i>f</i> | <i>SD</i> |
| Possess a comprehensive medical vocabulary | 2.25 | 106 | .88 | 2.38 | 60 | .83 |
| Revise material input by voice recognition | 2.00 | 101 | 1.09 | 1.67 | 60 | .87 |
| Select office equipment (other than computers) | 2.07 | 107 | .91 | 2.25 | 59 | .86 |
| Use desktop publishing software | 2.04 | 106 | 1.01 | 2.02 | 59 | .95 |
| Use financial/accounting software | 1.94 | 107 | .95 | 2.31 | 59 | .97 |
| Select software or hardware for purchase | 1.74 | 107 | .89 | 2.10 | 59 | .91 |
| Install computer software | 1.67 | 107 | .88 | 2.02 | 59 | .89 |
| Prepare payroll records | 1.65 | 107 | .83 | 1.95 | 59 | .97 |
| Use voice recognition software | 1.63 | 105 | .89 | 1.51 | 59 | .84 |
| Possess bilingual skills | 1.55 | 107 | .68 | 1.57 | 60 | .56 |
| Design or maintain a web site | 1.51 | 108 | .83 | 1.53 | 59 | .74 |

Note. Based on a Likert-type scale: 4—*Absolutely Essential*, 3—*Very Important*, 2—*Somewhat Important*, and 1—*Not Important*.

Even though these tasks had the lowest means, many of them were still rated as Somewhat Important.

Research Questions

Based upon the statement of the problem, three research questions were addressed:

Research Question 1

Do differences exist between the perceptions of legal secretaries and paralegals regarding the level of importance of the following job competencies? If so, what are these differences?

- a. personal competencies
- b. communication competencies
- c. office competencies
- d. computer competencies
- e. information processing competencies

Respondents were asked to rate the importance of selected tasks based upon their personal experience in a legal office. A Likert-type scale was used in which 4 represented *absolutely essential*; 3, *very important*; 2, *somewhat important*; and 1, *not important*. A total of 45 individual tasks were grouped into five overall job competencies: personal competencies (8 tasks), communications competencies (8 tasks), office competencies (8 tasks), computer competencies (13 tasks), and information processing competencies (8 tasks).

A multivariate analysis of variance (MANOVA) was conducted on the five job competencies (personal, communication, office, computer, and information processing) to determine if legal secretaries and paralegals (independent variables) differed in their perceptions of these job competencies (dependent variables). As shown in Table 9, the multivariate F ratio generated from Wilkes' lambda indicated that significant differences exist between legal secretaries and paralegals: Wilkes' $\lambda = .89$, $F(5, 139) = 3.58$, $p = .01$, $\eta^2 = .11$. Thus, to ascertain more precisely where differences occurred, a univariate follow-up analysis was completed on the five job competencies. Using an alpha level of .05, significant differences between the groups were found for office competencies [$F(1, 143) = 4.14$, $p = .04$, $\eta^2 = .03$] and information processing [$F(1, 143) = 3.89$, $p = .05$, $\eta^2 = .03$] competencies.

Follow-up analyses were conducted on each of the five job competencies and are reported in the following sections. Each job competency was analyzed separately using an omnibus test and subsequent univariate analysis. This procedure was followed on each job competency even if the omnibus test failed to produce significance at the alpha level. This procedure deviates from the commonly used statistical practice of not reporting on items failing to achieve significance. The decision to report, however, is a researcher-based decision in order to retain data that may be useful to the application of the findings at a later date. Likewise, conducting an omnibus test on each job competency group controls for Type I error while not penalizing excessively for Type II errors.

Table 9

Analysis of Variance for Differences in Perceptions of Job Competencies Between Legal Secretaries and Paralegals

| Omnibus test | | | | | | |
|---------------------------------------------------------------------------|-----------------|-----------|-----------|-----------|----------|-----------|
| Wilkes' $\lambda = .89$, $F(5, 139) = 3.58$, $p = .01$, $\eta^2 = .11$ | | | | | | |
| Univariate follow-up results | | | | | | |
| Job competencies | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> | η^2 |
| Personal | 31.02 | 1 | 31.02 | 3.51 | .06 | .02 |
| Communication | 17.84 | 1 | 17.84 | 1.39 | .24 | .01 |
| Computer | 27.06 | 1 | 27.06 | .65 | .42 | .00 |
| Office | 52.99 | 1 | 52.99 | 4.14 | .04 | .03 |
| Information processing | 78.88 | 1 | 78.88 | 3.89 | .05 | .03 |
| Means and standard deviations | | | | | | |
| | Legal secretary | | | Paralegal | | |
| | <i>M</i> | <i>f</i> | <i>SD</i> | <i>M</i> | <i>f</i> | <i>SD</i> |
| Personal | 26.23 | 92 | 2.94 | 27.19 | 53 | 3.04 |
| Communication | 23.27 | 92 | 3.75 | 24.00 | 53 | 3.26 |
| Computer | 31.07 | 92 | 6.36 | 31.96 | 53 | 6.68 |
| Office | 21.42 | 92 | 3.46 | 22.68 | 53 | 3.78 |
| Information processing | 21.74 | 92 | 4.64 | 20.21 | 53 | 4.26 |

Note. η^2 = effect size

Analysis of Office Competencies

As shown in Table 9, the analysis of variance (ANOVA) calculated on the office competencies was statistically significant $F(1, 143) = 4.14, p = .04, \eta^2 = .03$. Paralegals ($M = 22.68, SD = 3.78$) place more emphasis on office competencies than do legal secretaries ($M = 21.42, SD = 3.46$). The eight office competencies consisted of:

Conduct research using the law library or CD-ROMs (not the Internet)

Keyboard with accuracy

Keyboard with speed

Organize and maintain a filing system

Perform bookkeeping/accounting tasks (other than payroll records)

Prepare payroll records

Select office equipment (other than computers)

Use a typewriter

According to procedures previously described for Research Question 1, follow-up analyses were conducted on the eight tasks which comprise office competencies. As shown in Table 10, the multivariate F ratio generated from Wilkes' lambda indicated that significant differences exist between legal secretaries and paralegals: Wilkes' $\lambda = .87, F(8, 155) = 2.84, p = .01, \eta^2 = .13$. To determine where the differences occurred, univariate analysis was conducted. At the .05 alpha level, significant differences occurred in four office competencies: conducting research using the law library or CD-ROMs (not the Internet), $F(1, 162) = 7.94, p = .01, \eta^2 = .05$; keyboarding with speed, $F(1, 162) = 5.05, p = .03, \eta^2 = .03$; performing bookkeeping or accounting tasks (other

than payroll records), $F(1, 162) = 9.16, p = .00, \eta^2 = .05$; and preparing payroll records, $F(1, 162) = 4.89, p = .03, \eta^2 = .03$.

Paralegals ($M = 2.66, SD = .86$) place more emphasis on conducting research using the law library or CD-ROMs (not the Internet) than do legal secretaries ($M = 2.28, SD = .83$). Legal secretaries ($M = 3.41, SD = .57$) place more emphasis on keyboarding with speed than do paralegals ($M = 3.19, SD = .68$). Paralegals ($M = 2.58, SD = .89$) place more emphasis on performing bookkeeping or accounting tasks (other than payroll records) than do legal secretaries ($M = 2.16, SD = .81$). Paralegals ($M = 1.95, SD = .98$) place more emphasis on preparing payroll records than do legal secretaries ($M = 1.64, SD = .80$).

Table 10

Analysis of Variance for Office Competencies

| Omnibus test | | | | | | |
|---------------------------------------------------------------------------|-----------|-----------|-----------|----------|----------|----------|
| Wilkes' $\Lambda = .87$, $F(8, 155) = 2.84$, $p = .01$, $\eta^2 = .13$ | | | | | | |
| Univariate follow-up results | | | | | | |
| Office competencies | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> | η^2 |
| Conduct research using the law library or CD-ROMs (not the Internet) | 5.59 | 1 | 5.59 | 7.94 | .01 | .05 |
| Keyboard with accuracy | .25 | 1 | .25 | 1.10 | .30 | .01 |
| Keyboard with speed | 1.88 | 1 | 1.88 | 5.05 | .03 | .03 |
| Organize and maintain a filing system | .10 | 1 | .10 | .35 | .56 | .00 |
| Perform bookkeeping or accounting tasks (other than payroll records) | 6.49 | 1 | 6.49 | 9.16 | .00 | .05 |
| Prepare payroll records | 3.66 | 1 | 3.66 | 4.89 | .03 | .03 |
| Select office equipment (other than computers) | 1.20 | 1 | 1.20 | 1.51 | .22 | .01 |
| Use a typewriter | .05 | 1 | .05 | .06 | .81 | .00 |

(Table continues)

(Table 10 continued)

| | Means and standard deviations | | | | | |
|-------------------------------------------------------------------------|-------------------------------|----------|-----------|-----------|----------|-----------|
| | Legal secretary | | | Paralegal | | |
| | <i>M</i> | <i>f</i> | <i>SD</i> | <i>M</i> | <i>f</i> | <i>SD</i> |
| Conduct research using the law library or CD-ROMs (not the Internet) | 2.28 | 105 | .83 | 2.66 | 59 | .86 |
| Keyboard with accuracy | 3.74 | 105 | 4.6 | 3.66 | 59 | .51 |
| Keyboard with speed | 3.41 | 105 | .57 | 3.19 | 59 | .68 |
| Organize and maintain a filing system | 3.70 | 105 | .52 | 3.64 | 59 | .55 |
| Perform bookkeeping or accounting tasks (other than payroll records) | 2.16 | 105 | .81 | 2.58 | 59 | .89 |
| Prepare payroll records | 1.64 | 105 | .80 | 1.95 | 59 | .98 |
| Select office equipment (other than computers) | 2.08 | 105 | .91 | 2.25 | 59 | .86 |
| Use a typewriter | 2.52 | 105 | .95 | 2.56 | 59 | .86 |

Note. η^2 = effect size

Analysis of Information Processing Competencies

The ANOVA calculated on the information processing competencies was also statistically significant $F(1, 143) = 3.89, p = .05, \eta^2 = .03$ (see Table 9). Legal secretaries ($M = 21.74, SD = 4.64$) place more emphasis on information processing competencies

than do paralegals ($M = 20.21$, $SD = 4.26$). The eight information processing competencies consisted of:

Enter data on printed forms

Keyboard documents

Revise material input by voice recognition

Revise material keyboarded by others

Record and prepare meeting minutes

Transcribe from cassette dictation

Transcribe for shorthand/speedwriting notes

Use shorthand/speedwriting skills for taking notes

According to procedures previously described for Research Question 1, follow-up analyses were conducted on the eight tasks which comprise information processing competencies. As shown in Table 11, the multivariate F ratio generated from Wilkes' lambda indicated that significant differences exist between legal secretaries and paralegals: Wilkes' $\lambda = .80$, $F(8, 147) = 4.63$, $p = .00$, $\eta^2 = .20$. To determine where the differences occurred, univariate analysis was conducted. At the .05 alpha level, significant differences occurred in two information processing competencies: revising material keyboarded by others, $F(1, 154) = 18.38$, $p = .00$, $\eta^2 = .11$; and transcribing from cassette dictation, $F(1, 154) = 15.06$, $p = .00$, $\eta^2 = .09$. Legal secretaries ($M = 3.24$, $SD = .88$) place more emphasis on revising material keyboarded by others than do paralegals ($M = 2.61$, $SD = .88$). Legal secretaries ($M = 3.48$, $SD = .80$) place more emphasis on transcribing from cassette dictation than do paralegals ($M = 2.91$, $SD = 1.02$).

Table 11

Analysis of Variance for Information Processing Competencies

| Omnibus test | | | | | | |
|---------------------------------------------------------------------------|-----------|-----------|-----------|----------|----------|----------|
| Wilkes' $\Lambda = .80$, $F(8, 147) = 4.63$, $p = .00$, $\eta^2 = .20$ | | | | | | |
| Univariate follow-up results | | | | | | |
| Information processing competencies | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> | η^2 |
| Enter data on printed forms | .00 | 1 | .00 | .00 | .96 | .00 |
| Keyboard documents | .86 | 1 | .86 | 1.85 | .18 | .01 |
| Revise material input by voice recognition | 3.61 | 1 | 3.61 | 3.51 | .06 | .02 |
| Revise material keyboarded by others | 14.28 | 1 | 14.28 | 18.38 | .00 | .11 |
| Record and prepare meeting minutes | .68 | 1 | .68 | .79 | .38 | .01 |
| Transcribe from cassette dictation | 11.86 | 1 | 11.86 | 15.06 | .00 | .09 |
| Transcribe from shorthand and/or speedwriting notes | .59 | 1 | .59 | .54 | .46 | .00 |
| Use shorthand and/or speedwriting skills for taking notes | .20 | 1 | .20 | .18 | .68 | .00 |

(Table continues)

(Table 11 - Continued)

| | Means and standard deviations | | | | | |
|--------------------------------------------------------------|-------------------------------|----------|-----------|-----------|----------|-----------|
| | Legal secretary | | | Paralegal | | |
| | <i>M</i> | <i>f</i> | <i>SD</i> | <i>M</i> | <i>f</i> | <i>SD</i> |
| Enter data on printed forms | 3.11 | 99 | .82 | 3.11 | 57 | .67 |
| Keyboard documents | 3.51 | 99 | .71 | 3.35 | 57 | .64 |
| Revise material input by voice recognition | 2.00 | 99 | 1.09 | 1.68 | 57 | .87 |
| Revise material keyboarded by others | 3.24 | 99 | .88 | 2.61 | 57 | .88 |
| Record and prepare meeting minutes | 2.17 | 99 | 1.00 | 2.04 | 57 | .78 |
| Transcribe from cassette dictation | 3.48 | 99 | .80 | 2.91 | 57 | 1.02 |
| Transcribe from shorthand and/or speedwriting notes | 2.03 | 99 | 1.04 | 2.16 | 57 | 1.05 |
| Use shorthand and/or speedwriting skills for taking notes | 2.24 | 99 | 1.04 | 2.32 | 57 | 1.07 |

Note. η^2 = effect size

Analysis of Personal Competencies

The ANOVA computed on the personal competencies was not significant $F(1, 143) = 3.51, p = .06, \eta^2 = .02$ (see Table 9). According to procedures previously described for Research Question 1, follow-up analyses were conducted on the eight tasks which comprise personal competencies. As shown in Table 12, the multivariate F ratio

generated from Wilkes' lambda indicated that significant differences exist between legal secretaries and paralegals: Wilkes' $\lambda = .89$, $F(8, 154) = 2.28$, $p = .03$, $\eta^2 = .11$. To determine where the differences occurred, univariate analysis was conducted. At the .05 alpha level, significant differences occurred in one personal competency: attending seminars or meetings, $F(1, 161) = 10.86$, $p = .00$, $\eta^2 = .06$. Paralegals ($M = 3.09$, $SD = .76$) place more emphasis on attending seminars or meetings than do legal secretaries ($M = 2.67$, $SD = .78$).

Table 12

Analysis of Variance for Personal Competencies

| Omnibus test | | | | | | |
|---------------------------------------------------------------------------|------|----|------|-------|-----|----------|
| Wilkes' $\lambda = .89$, $F(8, 154) = 2.28$, $p = .03$, $\eta^2 = .11$ | | | | | | |
| Univariate follow-up results | | | | | | |
| Personal competencies | SS | df | MS | F | p | η^2 |
| Attends seminars or meetings | 6.47 | 1 | 6.47 | 10.86 | .00 | .06 |
| Encourage professional development of others | .08 | 1 | .08 | .14 | .71 | .00 |
| Join professional organizations | 1.49 | 1 | 1.49 | 2.21 | .14 | .01 |
| Maintain a professional appearance | .31 | 1 | .31 | .85 | .36 | .01 |
| Possess high ethical standards | .04 | 1 | .04 | .68 | .41 | .00 |
| Possess leadership skills | .36 | 1 | .36 | .65 | .42 | .00 |
| Upgrade skills as technologies change | .09 | 1 | .09 | .33 | .57 | .00 |
| Work well as a team member | .50 | 1 | .50 | 2.33 | .13 | .01 |

(Table continues)

(Table 12 continued)

| Personal competencies | Means and standard deviations | | | | | |
|----------------------------------------------|-------------------------------|----------|-----------|-----------|----------|-----------|
| | Legal secretary | | | Paralegal | | |
| | <i>M</i> | <i>f</i> | <i>SD</i> | <i>M</i> | <i>f</i> | <i>SD</i> |
| Attends seminars or meetings | 2.67 | 106 | .78 | 3.09 | 57 | .76 |
| Encourage professional development of others | 2.95 | 106 | .77 | 3.00 | 57 | 7.56 |
| Join professional organizations | 2.76 | 106 | .82 | 2.96 | 57 | .82 |
| Maintain a professional appearance | 3.55 | 106 | .59 | 3.46 | 57 | .63 |
| Possess high ethical standards | 3.93 | 106 | .25 | 3.96 | 57 | .19 |
| Possess leadership skills | 3.09 | 106 | .76 | 3.19 | 57 | .72 |
| Upgrade skills as technologies change | 3.69 | 106 | .51 | 3.74 | 57 | .52 |
| Work well as a team member | 3.78 | 106 | .44 | 3.67 | 57 | .51 |

Note. η^2 = effect size

Analysis of Communication Competencies

As shown in Table 9, the ANOVA computed on the communication competencies was not significant $F(1, 143) = 1.39, p = .24, \eta^2 = .01$. According to procedures previously described for Research Question 1, follow-up analyses were conducted on the eight tasks which comprise personal competencies. As shown in Table 13, the multivariate F ratio generated from Wilkes' lambda indicated that significant differences exist between legal secretaries and paralegals: Wilkes' $\lambda = .96, F(8, 154) = .87, p = .55,$

$\eta^2 = .04$. To determine where the differences occurred, univariate analysis was conducted. At the .05 alpha level, significant differences occurred in one communication competency: composing litigation/nonlitigation documents, $F(1, 161) = 5.31, p = .02, \eta^2 = .03$. Paralegals ($M = 3.34, SD = .78$) place more emphasis on composing litigation/nonlitigation documents than do legal secretaries ($M = 3.04, SD = .81$).

Table 13

Analysis of Variance for Communication Competencies

| Omnibus test | | | | | | |
|-----------------------------------------------------------------|------|----|------|------|-----|----------|
| Wilkes' $\Lambda = .96, F(8, 154) = .87, p = .55, \eta^2 = .04$ | | | | | | |
| Univariate follow-up results | | | | | | |
| Communication competencies | SS | df | MS | F | p | η^2 |
| Compose letters and memoranda | .61 | 1 | .61 | 2.35 | .13 | .01 |
| Compose litigation/nonlitigation documents | 3.40 | 1 | 3.40 | 5.31 | .02 | .03 |
| Deal with international clients or firms | .48 | 1 | .48 | .53 | .47 | .00 |
| Possess a comprehensive legal vocabulary | .26 | 1 | .26 | .74 | .39 | .01 |
| Possess a comprehensive medical vocabulary | .74 | 1 | .74 | .98 | .33 | .01 |
| Possess bilingual skills | .06 | 1 | .06 | .16 | .69 | .00 |
| Possess effective punctuation, spelling, and grammar skills | .13 | 1 | .13 | 1.23 | .27 | .01 |
| Possess effective speaking skills | .26 | 1 | .26 | .53 | .47 | .00 |

(Table continues)

(Table 13 continued)

| Means and standard deviations | | | | | | |
|-------------------------------------------------------------|-----------------|----------|-----------|-----------|----------|-----------|
| Communications competencies | Legal secretary | | | Paralegal | | |
| | <i>M</i> | <i>f</i> | <i>SD</i> | <i>M</i> | <i>f</i> | <i>SD</i> |
| Compose letters and memoranda | 3.57 | 104 | .54 | 3.69 | 59 | .46 |
| Compose litigation/nonlitigation documents | 3.04 | 104 | .81 | 3.34 | 59 | .78 |
| Deal with international clients or firms | 2.19 | 104 | .92 | 2.31 | 59 | 1.00 |
| Possess a comprehensive legal vocabulary | 3.44 | 104 | .61 | 3.53 | 59 | .57 |
| Possess a comprehensive medical vocabulary | 2.25 | 104 | .89 | 2.39 | 59 | .83 |
| Possess bilingual skills | 1.52 | 104 | .65 | 1.56 | 59 | .57 |
| Possess effective punctuation, spelling, and grammar skills | 3.86 | 104 | .35 | 3.92 | 59 | .28 |
| Possess effective speaking skills | 3.44 | 104 | .72 | 3.53 | 59 | .65 |

Note. η^2 = effect size

Analysis of Computer Competencies

The ANOVA computed on the computer competencies was not significant $F(1, 143) = .65, p = .42, \eta^2 = .00$ (see Table 9). According to procedures previously described for Research Question 1, follow-up analyses were conducted on the 13 tasks which comprise computer competencies. As shown in Table 14, the multivariate F ratio generated from Wilkes' lambda indicated that significant differences exist between legal

secretaries and paralegals: Wilkes' $\eta^2 = .78$, $F(13, 150) = 3.24$, $p = .00$, $\eta^2 = .22$. To determine where the differences occurred, univariate analysis was conducted. At the .05 alpha level, significant differences occurred in six computer competencies: conducting research on the Internet, $F(1, 162) = 6.08$, $p = .02$, $\eta^2 = .04$; installing computer software, $F(1, 162) = 5.64$, $p = .02$, $\eta^2 = .03$; selecting software and hardware for purchase, $F(1, 162) = 6.09$, $p = .02$, $\eta^2 = .04$; using financial or accounting software, $F(1, 162) = 5.10$, $p = .03$, $\eta^2 = .03$; using time and billing software, $F(1, 162) = 5.63$, $p = .02$, $\eta^2 = .03$; and using word processing software, $F(1, 162) = 4.19$, $p = .04$, $\eta^2 = .03$.

Legal secretaries ($M = 3.10$, $SD = 1.01$) place more emphasis on using time and billing software than do paralegals ($M = 2.71$, $SD = 1.04$); and legal secretaries ($M = 3.74$, $SD = .52$) place more emphasis on using word processing software than do paralegals ($M = 3.54$, $SD = .73$). Paralegals ($M = 3.14$, $SD = .75$) place more emphasis on conducting research on the Internet than do legal secretaries ($M = 2.81$, $SD = .85$). Paralegals ($M = 2.02$, $SD = .88$) place more emphasis on installing computer software than do legal secretaries ($M = 1.68$, $SD = .88$). Paralegals ($M = 2.10$, $SD = .89$) place more emphasis on selecting software and hardware for purchase than do legal secretaries ($M = 1.74$, $SD = .90$). Paralegals ($M = 2.31$, $SD = .97$) place more emphasis on using financial or accounting software than do legal secretaries ($M = 1.95$, $SD = .96$).

Table 14

Analysis of Variance for Computer Competencies

| Omnibus test | | | | | | |
|----------------------------------------------------------------------------|------|----|------|------|-----|----------|
| Wilkes' $\Lambda = .78$, $F(13, 150) = 3.24$, $p = .00$, $\eta^2 = .22$ | | | | | | |
| Univariate follow-up results | | | | | | |
| Computer competencies | SS | df | MS | F | p | η^2 |
| Conduct research on the Internet | 4.02 | 1 | 4.02 | 6.08 | .02 | .04 |
| Design or maintain a web site | .06 | 1 | .06 | .11 | .74 | .00 |
| File court documents electronically | 1.35 | 1 | 1.35 | 1.27 | .26 | .01 |
| Install computer software | 4.39 | 1 | 4.39 | 5.64 | .02 | .03 |
| Select software/hardware for purchase | 4.86 | 1 | 4.86 | 6.09 | .02 | .04 |
| Use calendaring/docketing software | 1.89 | 1 | 1.89 | 2.57 | .11 | .02 |
| Use case management software | .49 | 1 | .49 | .42 | .52 | .00 |
| Use desktop publishing software | .00 | 1 | .00 | .00 | .99 | .00 |
| Use financial or accounting software | 4.70 | 1 | 4.70 | 5.10 | .03 | .03 |
| Use presentation software | 1.62 | 1 | 1.62 | 1.51 | .22 | .01 |
| Use time and billing software | 5.83 | 1 | 5.83 | 5.63 | .02 | .03 |
| Use voice recognition software | .55 | 1 | .55 | .78 | .40 | .01 |
| Use word processing software | 1.52 | 1 | 1.52 | 4.19 | .04 | .03 |

(Table continues)

(Table 14 continued)

Means and Standard Deviations for Computer Job Competencies

| Computer competencies | Means and standard deviations | | | | | |
|---------------------------------------|-------------------------------|----------|-----------|-----------|----------|-----------|
| | Legal secretary | | | Paralegal | | |
| | <i>M</i> | <i>f</i> | <i>SD</i> | <i>M</i> | <i>f</i> | <i>SD</i> |
| Conduct research on the Internet | 2.81 | 105 | .85 | 3.14 | 59 | .75 |
| Design or maintain a web site | 1.49 | 105 | .80 | 1.53 | 59 | .57 |
| File court documents electronically | 2.71 | 105 | 1.09 | 2.53 | 59 | .92 |
| Install computer software | 1.68 | 105 | .88 | 2.02 | 59 | .88 |
| Select software/hardware for purchase | 1.74 | 105 | .90 | 2.10 | 59 | .89 |
| Use calendaring/docketing software | 3.20 | 105 | .92 | 3.42 | 59 | .72 |
| Use case management software | 2.73 | 105 | 1.10 | 2.85 | 59 | 1.03 |
| Use desktop publishing software | 2.02 | 105 | 1.00 | 2.02 | 59 | .82 |
| Use financial/accounting software | 1.95 | 105 | .96 | 2.31 | 59 | .97 |
| Use presentation software | 2.34 | 105 | 1.06 | 2.14 | 59 | .99 |
| Use time and billing software | 3.10 | 105 | 1.01 | 2.71 | 59 | 1.04 |
| Use voice recognition software | 1.63 | 105 | .89 | 1.51 | 59 | .73 |
| Use word processing software | 3.74 | 105 | .52 | 3.54 | 59 | .73 |

Note. η^2 = effect size

Research Question 1 Summary

Since the overall MANOVA found significant differences in the perceptions of legal secretaries and paralegals in both office and information processing competencies, follow-up tests were conducted. Four of the eight office competencies were statistically significant. Paralegals place more emphasis on conducting research using the law library or CD-ROMs (not the Internet), performing bookkeeping or accounting tasks (other than payroll records), and preparing payroll records than do legal secretaries. Legal secretaries place more importance on keyboarding with speed than do paralegals.

Two of the eight information processing competencies were statistically significant. Legal secretaries place more emphasis on revising material keyboarded by others and transcribing from cassette dictation than do paralegals.

Research Question 2

Do legal secretaries and paralegals differ in their use of software applications? If so, how do they differ?

Respondents were given a list of eight selected computer software applications used in a legal office and were asked to identify which software applications they used on a weekly basis. These applications included word processing, presentation, desktop publishing, case management, calendaring/docketing, time and billing, and voice recognition as well as the online research service or services. Additionally, respondents were asked to identify which brand name of software they used.

Word Processing Software

Chi-square tests were conducted to determine whether legal secretaries differed from paralegals in their use of software applications. The use of word processing

software was tested, and Table 15 summarizes these findings. The one independent variable was the main job responsibility (legal secretaries and paralegals) while the dependent variables were the type of word processing software used (Word, WordPerfect, or both Word and WordPerfect). Overall, significant differences were found, $\chi^2(2, n = 164) = 7.30, p = .03$. A higher percentage of legal secretaries (46.20%) use Word software than paralegals (32.80%). A higher percentage of paralegals (32.80%) use WordPerfect software than legal secretaries (15.10%). A slightly higher percentage of legal secretaries (38.70%) use both Word and WordPerfect software than paralegals (34.50%).

Table 15

Word Processing Software Use by Legal Secretaries and Paralegals

| Word processing software | Legal secretary | | Paralegal | |
|--------------------------|-----------------|-------|-----------|-------|
| | <i>f</i> | % | <i>f</i> | % |
| Word | 49 | 46.2 | 19 | 32.8 |
| WordPerfect | 16 | 15.1 | 19 | 32.8 |
| Both | 41 | 38.7 | 20 | 34.5 |
| Totals* | 106 | 100.0 | 58 | 100.0 |

Note. Four legal secretaries and two paralegals did not respond.

* $\chi^2(2, n = 164) = 7.30, p = .03$

Calendaring/Docketing Software

A chi-square test was conducted to determine whether legal secretaries differed from paralegals in their choice of calendaring/docketing software, and the results are summarized in Table 16. The two variables were the main job responsibility (legal secretaries and paralegals) and the type of calendaring/docketing software used (CompuLaw, Elite, PracticeMaster, some other calendaring/docketing software, or no calendaring/docketing software). Significant differences were found, $\chi^2(4, n = 159) = 14.20, p = .01$. A slightly higher percentage of legal secretaries (2.90%) use CompuLaw software than paralegals (1.80%). A higher percentage of legal secretaries (10.70%) use Elite software than paralegals (1.80%). A higher percentage of paralegals (3.60%) use PracticeMaster software than legal secretaries (0.00%). A higher percentage of paralegals (67.90%) use some other calendaring/docketing software than legal secretaries (44.70%). A higher percentage of legal secretaries (41.70%) do not use any calendaring/docketing software than paralegals (25.00%).

Table 16

Calendaring/Docketing Software Use by Legal Secretaries and Paralegals

| Calendaring/docketing software | Legal secretary | | Paralegal | |
|--------------------------------|-----------------|-------|-----------|-------|
| | <i>f</i> | % | <i>f</i> | % |
| CompuLaw | 3 | 2.9 | 1 | 1.8 |
| Elite | 11 | 10.7 | 1 | 1.8 |
| PracticeMaster | 0 | 0.0 | 2 | 3.6 |
| Other | 46 | 44.7 | 38 | 67.9 |
| None | 43 | 41.7 | 14 | 25.0 |
| Totals* | 103 | 100.0 | 56 | 100.0 |

Note. Five legal secretaries and four paralegals did not respond.

$$*\chi^2(4, n = 159) = 14.20, p = .01$$

Even though no significant differences were found when additional chi-square tests were conducted on the remaining software applications (presentation, online research, desktop publishing, case management, time and billing, and voice recognition), a brief description of these findings is provided.

Presentation Software

A chi-square test was conducted to determine whether legal secretaries differed from paralegals in their choice of presentation software. The two variables were the main job responsibility (legal secretaries and paralegals) and the type of presentation software used (PowerPoint, some other presentation software, or no presentation software). No

significant differences were found, $\chi^2(2, n = 157) = 3.09, p = .21$. The percentage of legal secretaries and paralegals that use presentation software appears to be the same.

Online Research

A chi-square test was conducted to determine if legal secretaries and paralegals differ in their use of online legal research services. The two variables were the main job responsibility (legal secretaries and paralegals) and whether an online legal research service was used (yes, no). No significant differences were found, $\chi^2(2, n = 159) = 2.35, p = .31$. The percentage of legal secretaries and paralegals that use online legal research services appears to be the same.

Desktop Publishing Software

In order to determine if differences occur in the use of desktop publishing software by legal secretaries and paralegals, a chi-square test was conducted. The two variables were the main job responsibility (legal secretaries and paralegals) and the type of desktop publishing software used (PageMaker, some other desktop publishing software, or no desktop publishing software). No significant differences were found, $\chi^2(2, n = 156) = 0.37, p = .83$. The percentage of legal secretaries and paralegals that use desktop publishing software appears to be the same.

Case Management Software

A chi-square test was conducted to determine whether legal secretaries differ from paralegals in their use of case management software. The two variables were the main job responsibility (legal secretaries and paralegals) and the type of case management software used (AbacusLaw, Amicus Attorney, Time Matters, some other case management software, or no case management software). No significant differences

were found, $\chi^2(4, n = 160) = 6.18, p = .19$). The percentage of legal secretaries and paralegals that use case management software appears to be the same.

Time and Billing Software

In order to determine if differences occur in the use of time and billing software by legal secretaries and paralegals, a chi-square test was conducted. The two variables were the main job responsibility (legal secretaries and paralegals) and the type of time and billing software used (PCLaw, QuickBooksPro, TABS III, Timeslips, some other time and billing software, or no time and billing software). No significant differences were found, $\chi^2(29, n = 170) = 35.34, p = .19$. The percentage of legal secretaries and paralegals that use time and billing software appears to be the same.

Voice Recognition Software

To determine if differences exist between legal secretaries and paralegals in their use of voice recognition software, a chi-square test was conducted. The two variables were the main job responsibility (legal secretaries and paralegals) and the type of voice recognition software used (Dragon Naturally Speaking, IBM Via Voice, some other voice recognition software, or no voice recognition software). No significant differences were found, $\chi^2(3, n = 157) = 2.76, p = .43$. The percentage of legal secretaries and paralegals that use voice recognition software appears to be the same.

Software Use

Due to the unique nature of the legal office, numerous software applications have been developed specifically for the legal office. Information was obtained from the respondents regarding the degree of use of these software packages as well as other applications used in a variety of offices. Selected demographic findings are included in

the Appendix J for the following software applications and the brand names used by respondents: word processing, presentation, desktop publishing, case management, calendaring/docketing, time and billing, and voice recognition as well as the online research service or services.

Research Question 2 Summary

Chi-square tests were conducted on the eight selected software applications and identified significant differences in the use of word processing software and calendaring/docketing software. A larger percentage of legal secretaries use Word or both Word and WordPerfect word processing software than paralegals. A larger percentage of paralegals use WordPerfect word processing software than do legal secretaries. A higher percentage of legal secretaries use CompuLaw or Elite calendaring/docketing software than do paralegals. Additionally, a higher percentage of legal secretaries do not use any calendaring/docketing software than do paralegals. A larger percentage of paralegals use PracticeMaster calendaring/docketing software than legal secretaries, and a higher percentage of paralegals use some other type of calendaring/docketing software than legal secretaries.

Research Question 3

To what extent do legal secretaries and paralegals differ according to selected demographic variables?

- a. region
- b. professional certification
- c. type of firm
- d. years worked in a legal office

Regions

Regions were grouped based upon the area of the country in which they are located. Regions 1 and 2 were grouped to form the northeast region. Regions 3 and 5 were grouped to form the midwest region. Regions 4 and 6 were grouped to form the southeast region. Regions 7 and 8 were grouped to form the western region. A chi-square test was conducted to determine whether legal secretaries differed from paralegals based upon the regions in which they live. The two independent variables were the main job responsibility (legal secretaries and paralegals) and the regions in which they live (northeast, midwest, southeast, and western) were the dependent variables. No significant differences were found, $\chi^2(3, n = 170) = 7.06, p = .07$. The relative percentage of legal secretaries to paralegals is the same across regions. Table 17 summarizes the results of these findings.

Table 17

Regions in Which Legal Secretaries and Paralegals Live

| Region | Legal secretary (n = 110) | | Paralegal (n = 60) | | Totals |
|-----------|---------------------------|------|--------------------|------|--------|
| | <i>f</i> | % | <i>f</i> | % | |
| Northeast | 15 | 60.0 | 10 | 40.0 | 100.0 |
| Midwest | 31 | 70.5 | 13 | 29.5 | 100.0 |
| Southeast | 42 | 73.7 | 15 | 26.3 | 100.0 |
| Western | 22 | 50.0 | 22 | 50.0 | 100.0 |

Note. Regions 1 and 2 were grouped to form the northeast region. Regions 3 and 5 were grouped to form the midwest region. Regions 4 and 6 were grouped to form the southeast region. Regions 7 and 8 were grouped to form the western region

$$\chi^2(3, n = 170) = 7.06, p = .07$$

Professional Certifications

A chi-square test was conducted to determine whether legal secretaries differed from paralegals in obtaining professional certification. The two variables were the main job responsibility (legal secretaries and paralegals) and whether they had obtained professional certification. Significant differences were found, $\chi^2(1, n = 170) = 7.22$, $p = .01$. As shown in Table 18, a higher percentage of paralegals (70.00%) has obtained professional certification than legal secretaries (47.27%).

Table 18

Professional Certifications Obtained by Legal Secretaries and Paralegals

| Professional certifications | Legal secretary | | Paralegal | |
|-----------------------------|-----------------|-------|-----------|-------|
| | <i>f</i> | % | <i>f</i> | % |
| Yes | 52 | 47.3 | 42 | 70.0 |
| No | 58 | 52.7 | 18 | 30.0 |
| Totals | 110 | 100.0 | 60 | 100.0 |

$$\chi^2(1, n = 170) = 7.22, p = .01$$

Types of Law Firms

A chi-square test was conducted to determine whether legal secretaries differed from paralegals based upon the type of law firms in which they are employed. The two variables were the main job responsibility (legal secretaries and paralegals) and the type of law firm in which they are employed (private or corporate). Significant differences were found, $\chi^2(1, n = 140) = 4.84, p = .03$. A higher percentage of paralegals (89.58%) are employed in private firms than legal secretaries (71.74%). A higher percentage of legal secretaries (28.26%) are employed in corporate firms than paralegals (10.42%).

Table 19 summarizes these findings.

Table 19

Types of Law Firms in Which Legal Secretaries and Paralegals are Employed

| Type of law firm | Legal secretary | | Paralegal | |
|------------------|-----------------|-------|-----------|-------|
| | <i>f</i> | % | <i>f</i> | % |
| Private | 66 | 71.7 | 43 | 89.6 |
| Corporate | 26 | 28.3 | 5 | 10.4 |
| Totals | 92 | 100.0 | 48 | 100.0 |

Note. Thirteen legal secretaries work for another type of firm and five legal secretaries did not respond. Nine paralegals were employed in different types of firms, and three paralegals did not respond.

$$\chi^2(1, n = 140) = 4.84, p = .03$$

Years Worked in a Legal Office

An ANOVA test was conducted to determine if differences exist between legal secretaries and paralegals (the independent variables), and the dependent variables—the years in which respondents have worked in a legal office. No significant differences were found $F(1, 155) = 1.81, p = .18$. The populations of legal secretaries and paralegals do not differ regarding their average experience.

Research Question 3 Summary

Chi-square tests identified significant differences in regard to professional certification and the type of law firm in which respondents' work. A larger percentage of paralegals possess one or more professional certifications than legal secretaries. A higher

percentage of paralegals work in private firms than legal secretaries while a larger percentage of legal secretaries work in corporate firms than paralegals.

Summary

The results of this research study were obtained from 110 legal secretaries and 60 paralegals. These job responsibilities tended to overlap at times as 13 (11.81%) legal secretaries also performed paralegal tasks and 20 (33.33%) paralegals also performed legal secretarial duties.

Forty-five occupational tasks were grouped into five job competencies (personal, communication, office, computer, and information processing), and respondents were asked to rate each task based upon their perceived importance. Significant differences were found in office competencies and information processing competencies. A follow-up analysis of the office competencies found significant differences in four of the eight tasks: conducting research using the law library or CD-ROMs (not the Internet); keyboarding with speed; performing bookkeeping or accounting tasks (other than payroll records); and preparing payroll records. The follow-up analysis conducted on the eight information processing competencies revealed significant differences in two—revising material keyboarded by others and transcribing from cassette dictation.

Respondents were asked to identify which of the eight selected computer software applications they used on a weekly basis, if any. Significant differences were found in the use of word processing and calendaring/docketing software by legal secretaries and paralegals. No significant differences were found in the use of online legal research services as well as presentation, desktop publishing, case management, time and billing, and voice recognition software applications.

After an analysis of the four selected demographic items, significant differences were found in two of them—obtaining professional certification and the type law firms in which respondents are employed. However, no significant differences were found in the other two—the regions in which respondents live and the number of years respondents have worked in a legal office.

Respondents were asked to rate 45 selected job skills using a Likert-type scale in which 4 represented *absolutely essential*; 3, *very important*; 2, *somewhat important*; and 1, *not important*. Possessing high ethical standards was rated as the most important job characteristic by both legal secretaries ($M = 3.92$) and paralegals ($M = 3.95$). The skill rated least important by legal secretaries was designing and maintaining a web site ($M = 1.51$) while paralegals rated using voice recognition software ($M = 1.51$) as their least important skill.

Both legal secretaries (46.36%) and paralegals (45.00%) stated they had received some training above the secondary level although most do not hold post-secondary degrees. Few paralegals have obtained a one-year paralegal diploma (18.33%), even fewer have an associate degree (11.67%), and well over half do not possess a paralegal degree (65.00%). Few legal secretaries hold an associate degree (7.27%) or a 4-year degree (0.91%).

Almost half of the legal secretaries (48.19%) reported their ages to be from 42-53. One-third of paralegals (33.33%) reported their ages to be from 30-41, and another third (33.33%) reported their ages to be from 42-53.

Almost half of the legal secretaries (47.27%) responded that they held one or more professional certification, but very few (8.18%) plan to obtain one or more

certifications in the future. Well over half of paralegals (70.00%) held one or more professional certification, but very few (13.33%) plan to obtain one or more certifications in the future.

Over half of legal secretaries (65.45%) and almost half of paralegals (48.33%) work for 2 to 10 attorneys. Over half of legal secretaries (51.82%) and paralegals (60.00%) are employed in firms with 2 to 50 attorneys. Well over half of legal secretaries (70.00%) and paralegals (61.67%) have worked in the present firms from 1 to 10 years. A similar percentage of legal secretaries (34.55%) and paralegals (26.67%) have been employed in legal offices from 11 to 20 years.

As part of a successful law office support staff, legal secretaries and paralegals may often share a variety of job tasks. Individuals working in these professions, however, are often called upon to possess a variety of unique skills and abilities.

V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Since American schools began teaching bookkeeping and business arithmetic in the seventeenth and eighteenth centuries, one of the biggest challenges business educators have faced is to discover the needs of the business community and then develop courses of study that will allow students to obtain appropriate employability skills (Schmidt, Jennings, & Wanous, 1990; Waters, 1987). Today's business educators face this same quandary as the needs of the business community are never static. Continual research must be conducted so that educators can make informed decisions as they revise their curriculum.

The need for well-trained legal secretaries and paralegals continues to grow. In order to meet this need, up-to-date research must also be available as educators develop relevant curriculum for these unique fields of study. Broadway (1988), Camfield (1983), Harrison (1999), and Ward (1974) each indicated that research must be conducted using legal secretaries and paralegals in order to obtain meaningful results. Barclay's (1950) research was conducted using members of the Los Angeles, California, chapter of the Legal Secretaries Association as they "are progressive and professional-minded . . . conscientious about their work, . . . and who would be extremely interested in enhancing their profession" (p. 44). Blyth (1976) also selected participants who belong to a

professional organization; namely of (the Dearborn, Michigan, chapter of the National Association of Legal Secretaries) to obtain the most valid results possible. “NALS membership . . . is an indication of professionalism and probable competency in a wide range of commonly required skills and knowledge” (p. 22).

The current research attempted to incorporate the guidance of previous research. Legal secretaries and paralegals who are members of NALS . . . the association for legal professionals (NALS) were selected as the sample population for this national study.

The Legal Secretaries Association began in 1929, and its members were part of Barclay’s research in 1950. By the time Blyth’s research was done in 1976, the organization was known as the National Association of Legal Secretaries. Today, the name has once again been updated to NALS . . . the association for legal professionals to reflect the diversity of its membership.

The current research was designed to:

1. Discover the level of importance qualified legal secretaries and paralegals placed on selected job competencies based upon their experience in a legal office.
2. Identify the degree to which selected software applications were used.
3. Determine if differences exist between legal secretaries and paralegals on selected demographic information—regions in which respondents’ live, professional certifications held by respondents, type of law firms in which respondents’ work, and the number of years respondents’ worked in a legal office.

With the approval of the Board of Directors of NALS, the researcher obtained a 10% random sample of the 5,601 national members. A survey instrument developed by

the researcher was mailed to 564 NALS members using a 10 percent random sample. A total of 209 valid surveys were returned for a 37.06% response rate.

Since this study evaluated the job skills of legal secretaries and paralegals, the findings of this research were determined by the results obtained from 110 (52.6%) legal secretaries and 60 (28.7%) paralegals. The results of this study will be used by educators for curricular development. NALS will also use these findings as they update the information they furnish to their members.

The survey instrument was divided into three sections. The first section consisted of demographic information; the second used a 4-point Likert-type scale to determine the importance of 45 job tasks divided into five job competencies, and the last section was designed to gather information regarding the selected types of software applications being used.

Demographics. The majority of legal secretaries (71.0%) and paralegals (66.7%) had received some vocational/technical training or a two-year associate degree. Very few legal secretaries (10.0%) or paralegals (15.0%) had obtained a bachelor's degree. Very few legal secretaries (12.7%) and one-third of paralegals (33.3%) had obtained a paralegal degree.

Almost half of legal secretaries (48.2%) were 42–53 years of age while one-fourth (25.5%) were 54–65 years of age. Most of the paralegals were divided among three age ranges: 30–41 (33.3%); 42–53 (33.3%); 54–65 (21.7%). Only one legal secretary (0.9%) and one paralegal (1.7%) were male.

Nearly half of the legal secretaries (47.3%) and a large majority of paralegals (70.0%) held one or more professional certification. This number may be high because

all of the respondents were currently members of NALS . . . the association for legal professionals. Legal secretaries and paralegals who belong to one or more professional organizations may be more likely to earn professional certifications.

The majority of legal secretaries (60.0%) and paralegals (73.3%) work in a private practice. The majority of legal secretaries (51.8%) and paralegals (60.0%) work in firms with 2–50 attorneys. The majority of legal secretaries (65.5%) and almost half of paralegals (48.3%) are responsible to 2–10 people.

Well over half of legal secretaries (70.00%) and paralegals (61.67%) have worked at their present firm from 1–10 years. One-third of legal secretaries (34.55%) and one-fourth of the paralegals (26.67%) have worked in a legal office from 11–20 years.

The majority of legal secretaries (66.4%) spend from 31–40 hours each week performing legal secretarial duties, but a few (11.8%) also perform some paralegal tasks. Almost half of paralegals (46.7%) spend from 31–40 hours each week performing paralegal duties, but one-third (33.3%) also perform some legal secretarial tasks.

Approximately one-third of legal secretaries (32.7%) felt there is a shortage of qualified legal secretaries in their region; but very few (17.3%) felt there is a shortage of qualified paralegals in their region. Approximately one-third of paralegals (35.0%) felt there is a shortage of qualified paralegals in their region; while one-half (50.0%) felt there is a shortage of qualified legal secretaries in their region.

Research question 1. Do differences exist between the perceptions of legal secretaries and paralegals regarding the level of importance of the following job competencies? If so, what are these differences?

- a. personal competencies
- b. communication competencies
- c. office competencies
- d. computer competencies
- e. information processing competencies

A multivariate analysis of variance (MANOVA) test was conducted to determine if the perceptions of the independent variables—legal secretaries and paralegals—are statistically significant when compared with the dependent variables—45 job tasks grouped into five job competencies. Significant differences were found.

A univariate follow-up analysis was completed on these five job competencies. An analysis of variance (ANOVA) using an alpha level of .05 found significant differences between legal secretaries and paralegals in both office competencies and information processing competencies. Paralegals place more emphasis on office competencies than legal secretaries, while legal secretaries place more emphasis on information processing competencies than paralegals. The eight office competencies included:

Conduct research using the law library or CD-ROMs (not the Internet)

Keyboard with accuracy

Keyboard with speed

Organize and maintain a filing system

Perform bookkeeping/accounting tasks (other than payroll records)

Prepare payroll records

Select office equipment (other than computers)

Use a typewriter

The eight information processing competencies consisted of:

Enter data on printed forms

Keyboard documents

Revise material input by voice recognition

Revise material keyboarded by others

Record and prepare meeting minutes

Transcribe from cassette dictation

Transcribe for shorthand/speedwriting notes

Use shorthand/speedwriting skills for taking notes

ANOVAs were conducted on both the office competencies and information processing competencies. Of the eight job tasks that comprised the office competency, four were found to be statistically significant—conducting research using the law library or CD-ROMs (not the Internet); keyboarding with speed; performing bookkeeping or accounting tasks (other than payroll records); and preparing payroll records. Additionally, two of the information processing competencies were also statistically significant—revising material keyboarded by others and transcribing from cassette dictation.

Research question 2. Do legal secretaries and paralegals differ in their use of software applications? If so, how do they differ?

Chi-square tests were conducted to determine whether legal secretaries and paralegals differed in their use of online legal research services as well as word

processing software applications, calendaring/docketing software applications, presentation software applications, desktop publishing software applications, case management software applications, time and billing software applications, and voice recognition software applications. Significant differences were found in the use of word processing software and calendaring/docketing software.

Word software is used by a higher percentage of legal secretaries (46.20%) than paralegals (32.80%). Conversely, WordPerfect software is used by a higher percentage of paralegals (32.80%) than legal secretaries (15.10%). More legal secretaries (38.70%) use both Word and WordPerfect software than paralegals (34.50%).

More legal secretaries use CompuLaw (2.90%) calendaring/docketing software than paralegals (1.80%), and more legal secretaries use Elite (10.70%) calendaring/docketing software than paralegals (1.80%). PracticeMaster calendaring/docketing software is used by a higher percentage of paralegals (3.60%) than legal secretaries (0.00%). A higher percentage of paralegals (67.90%) use some other type of calendaring/docketing software than legal secretaries (44.70%), and a higher percentage of legal secretaries (41.70%) do not use any calendaring/docketing software than paralegals (25.00%). No significant differences were found in the use of online legal research services as well as presentation software applications, desktop publishing software applications, case management software applications, time and billing software applications, and voice recognition software applications.

Research question 3. To what extent do legal secretaries and paralegals differ according to selected demographic variables?

- a. region
- b. professional certification
- c. type of firm
- d. years worked in a legal office

A chi-square test was conducted to determine whether legal secretaries differed from paralegals based upon the regions in which they live, but no significant differences were found. Significant differences were found when a chi-square test was conducted to determine whether legal secretaries differed from paralegals in obtaining professional certification. More paralegals (70.00%) have obtained one or more professional certifications than legal secretaries (47.27%). A chi-square test was conducted to determine whether legal secretaries differed from paralegals based upon the type of law firms in which they are employed. Significant differences were found. More paralegals (89.58%) are employed in private law firms than legal secretaries (71.74%); however, more legal secretaries (28.26%) are employed in corporate law firms than paralegals (10.42%). An ANOVA test was conducted to determine if relationships exist between legal secretaries and paralegals based upon the years in which respondents have worked in a legal office; however, no significant differences were found.

Software use. The most commonly used software application was word processing. Almost half of legal secretaries use Word (44.5%) while over one-third use both Word and WordPerfect (37.3%). One-third of paralegals use Word (31.7%), one-third use WordPerfect (31.7%), and one-third use both Word and WordPerfect (33.3%).

Nearly half of the legal secretaries (43.6%) and one-third of the paralegals (30.0%) use PowerPoint.

When conducting legal research, almost half of legal secretaries (40.9%) and paralegals (48.3%) use Westlaw while about one-third of legal secretaries (32.7%) and paralegals (31.7%) use LexisNexis.

Case management software is used by one-third of legal secretaries (33.6%) and by over half (53.3%) of paralegals. Calendaring/docketing software is used by over half of legal secretaries (54.6%) and paralegals (70.0%). Time and billing software is used by a majority of legal secretaries (66.3%) and paralegals (78.4%). Desktop publishing software is used by relatively few legal secretaries (5.4%) and paralegals (6.7%). Finally, voice recognition software is used by relatively few legal secretaries (5.4%) and paralegals (5.0%).

Job competencies with the highest means. A means comparison was made to determine which of the 45 job characteristics were most important to legal secretaries and paralegals. Respondents had used a 4-point Likert-type scale: 4—*Absolutely Essential*; 3—*Very Important*; 2—*Somewhat Important*, and 1—*Not Important*. Both the legal secretaries ($M = 3.92$) and paralegals ($M = 3.95$) rated possessing high ethical standards as the most important job task. The second most highly rated job task by both legal secretaries ($M = 3.85$) and paralegals ($M = 3.92$) was possessing effective grammar, spelling, and punctuation skills. Legal secretaries then rated working well as a team member ($M = 3.79$), using word processing software ($M = 3.75$), keyboarding with accuracy ($M = 3.74$), organizing and maintaining a filing system ($M = 3.69$), and upgrading skills as technology changes ($M = 3.69$). Paralegals rated upgrading skills as

technology changes ($M = 3.75$), composing letters and memoranda ($M = 3.70$), working well as a team member ($M = 3.67$), and keyboarding with accuracy ($M = 3.67$).

Conclusions

Based upon the findings of the study, the following conclusions can be made.

1. A higher level of training in information processing skills is used by legal secretaries while paralegals use a higher degree of training in office skills.
2. Both legal secretaries and paralegals possess relatively the same degree of skill in personal, communication, and computer skills.
3. The skills needed by legal secretaries and paralegals are the same when comparing the regions of the country in which they live and the number of years in which they have been employed in legal offices.
4. A larger proportion of paralegals obtains one or more professional certifications than legal secretaries.
5. More legal secretaries are employed in corporate law firms than paralegals while more paralegals work in private law firms.
6. Legal secretaries use Word or both Word and WordPerfect more than paralegals. Legal secretaries more frequently use CompuLaw or Elite calendaring/docketing software than paralegals. Legal secretaries, however, are more likely to not use any calendaring/docketing software than paralegals. Paralegals use WordPerfect software and PracticeMaster calendaring/docketing software more than legal secretaries. No inferences can be made regarding the percentage of use by legal secretaries and paralegals with regard to presentation software applications, desktop publishing software applications, case management software applications, time and

billing software applications, voice recognition software applications, and online legal research services.

7. Legal secretaries and paralegals possess high ethical standards.

8. Some post-secondary education is important for legal secretaries and paralegals although possessing a two- and four-year degree is not crucial. Most paralegals do not obtain a paralegal degree; however, if a paralegal degree is obtained, it is usually a one- or two-year degree.

9. Legal secretaries and paralegals receive training through which they can develop excellent grammar, spelling, and punctuation skills; be able to work well as a team member; and be willing to upgrade their skills as technology continues to change. Legal secretaries and paralegals keyboard with accuracy.

10. Legal secretaries in particular organize and maintain a filing system while composing letters and memoranda is an additional skill for paralegals.

11. Legal secretaries sometimes perform paralegal duties and paralegals sometimes perform legal secretarial duties.

Recommendations

The following recommendations can be made based upon the conclusions.

1. The findings obtained from this study should be used by secondary and post-secondary educators as curricular decisions are made regarding the legal secretarial and paralegal training programs.

2. Currently there is a dearth of research specific to the legal field. Further research at the national, state, and local levels is crucial in order for educators to continue to prepare qualified legal secretaries and paralegals.

3. This study could be replicated using various sample populations: (1) members of other professional organizations, (2) individuals who do not belong to any professional organizations, (3) participants who belong to professional organizations and those who do not belong to any professional organization so comparisons can be made between these two groups.

4. Studies could be conducted to determine how often legal secretaries perform paralegal tasks and to identify these tasks. Conversely, paralegals could be surveyed to determine how often they perform legal secretarial tasks and to identify these tasks.

5. Studies could be conducted that would discover those job competencies that will be needed in the future by both legal secretaries and paralegals. Of course, with the rapid technological advancements occurring today, this study might be limited to the perceived needs in the next three to five years.

6. Attorneys could be surveyed to ascertain the job competencies they perceive as essential for success as a legal secretary or paralegal. Research could be conducted using selected members of the legal support team to determine if the current educational preparation for legal secretaries and paralegals is sufficient.

7. Further studies could be done that would examine the need for paralegal certification and whether national certification requirements should be implemented.

8. More specific research could be completed that would identify which legal-specific software applications are used by legal secretaries and paralegals.

9. These findings could be used by *NALS . . . the association for legal professionals* (NALS) as they revise and update the variety of resource materials they produce.

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APPENDICES

APPENDIX A

IRB APPROVAL MEMORANDUM

Auburn University

Auburn University, Alabama 36849



Office of Human Subjects Research
307 Sanford Hall

Telephone: 334-844-5966
Fax: 334-844-4391
hsubjec@auburn.edu

September 8, 2003

MEMORANDUM TO: Lois I. Cox
Curriculum and Teaching

PROTOCOL TITLE: "Job Competencies of Legal Secretaries and Paralegals as Perceived by Selected Members of NALS...the Association for Legal Professionals with Implications for Curricular Development"

IRB File: #03-150 EX 0308

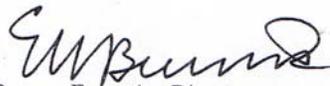
The referenced protocol was approved "Exempt" from further review under 45 CFR 46.101 (b)(2) by IRB procedure on August 18, 2003. You should retain this letter in your files, along with a copy of the revised protocol and other pertinent information concerning your study. If you should anticipate a change in any of the procedures authorized in protocol #03-150, you must request and receive IRB approval prior to implementation of any revision. Please reference the above IRB File in any correspondence regarding this project.

If you will be unable to file a Final Report on your project before August 17, 2004, you must submit a request for an extension of approval to the IRB no later than July 31, 2004. If your IRB authorization expires and/or you have not received written notice that a request for an extension has been approved prior to August 17, 2004, you must suspend the project immediately and contact the Office of Human Subjects Research for assistance.

A Final Report will be required to close your IRB project file.

If you have any questions concerning this Board action, please contact the Office of Human Subjects Research at 844-5966.

Sincerely,

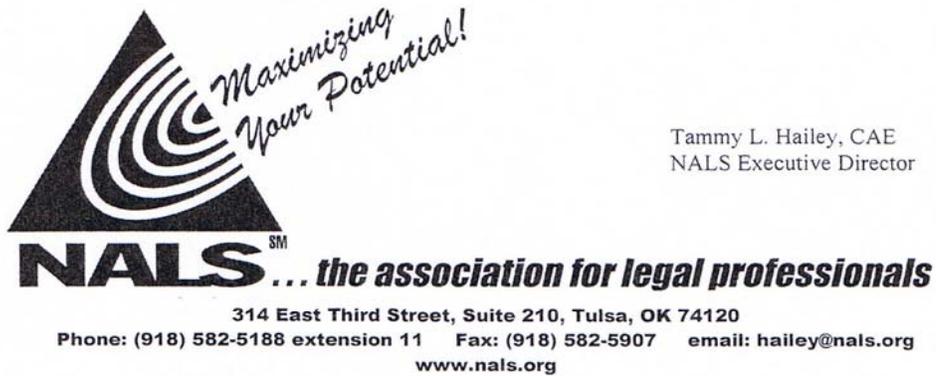


E. N. (Chip) Burson, Executive Director
Office of Human Subjects Research

cc: Dr. Andrew M. Weaver
Dr. Bonnie J. White

APPENDIX B

NALS APPROVAL LETTER



Tammy L. Hailey, CAE
NALS Executive Director

June 3, 2003

To Whom It May Concern:

Lois Cox has requested permission from NALS to use its member mailing list for a survey that will help her in the completion of her studies.

This shall hereby serve as notice that Lois Cox has the permission of the NALS Board of Directors to use the NALS Mailing List for the purpose stated above.

Sincerely,

Tammy L. Hailey, CAE
NALS Executive Director

APPENDIX C

EVERGREEN MARKETING LETTER

Aug 04 03 09:20a

p. 1

**EVERGREEN
MARKETING**

318 BEVERLY PKWY.
PENSACOLA, FL 32505

PHONE 850-429-0700
FAX 850-429-0678
e-mail mail@govergreen.com

August 4, 2003

Ms. Lois Cox
Pensacola, FL

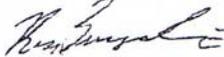
Dear Ms. Cox;

This letter is submitted as verification that Evergreen Marketing will be handling the printing and mailing services for your research survey.

Per our conversations, this survey material will be mailed out to 560 people. Each person will receive an initial postcard, followed in approximately one week with an information letter, the survey, and a business reply envelope. Each person will also receive a follow-up postcard approximately one week after the surveys are mailed. Anyone who has not returned their surveys within two weeks will be sent a follow-up letter, another copy of the survey, and another business reply envelope. All completed surveys will be mailed to Evergreen Marketing and you will be notified upon receipt.

We look forward to working with you, Lois. Should you have any questions or concerns, please do not hesitate to contact us.

Sincerely,



Ken Barzacchini
Evergreen Marketing

KB/vjm

APPENDIX D

INITIAL POSTCARD

With the approval of the NALS Board of Directors, you have been selected to participate in a national study to identify those job skills and traits that today's legal support staff must possess. NALS will receive a complete report of the findings obtained from this study, and educators will also use this information as they develop relevant curriculum.

In a few days, you will receive a questionnaire that should take approximately 20 minutes to complete. By taking the time to share your professional expertise, valuable information can be obtained that will improve the quality of the legal support staff.

Miss Lois Cox

850-477-9366

loiscox@mindspring.com

APPENDIX E

INITIAL INFORMATION LETTER

Auburn University

Auburn University, Alabama 36849-5212

Curriculum and Teaching
College of Education
5040 Haley Center

Telephone: (334) 844-4434
Fax: (334) 844-6789

INFORMATION SHEET FOR

*Job Competencies of Legal Secretaries and Paralegals as Perceived by Selected Members of
NALS . . . The Association for Legal Professionals with Implications for Curricular Development*

Current Date

Name
Address 1
Address 2

Dear Name:

During the past 100 years, a great deal of research has been conducted that examined secretarial job skills; however, very few studies have investigated legal secretaries or paralegals.

You are invited to participate in a national study to help identify the job competencies that a successful legal secretary or paralegal must possess. Your participation is still encouraged even if you have never been employed as a legal secretary or paralegal. Without your unique perspective the findings of this study will not be complete. This study is being conducted by Miss Lois I. Cox, a doctoral candidate, under the supervision of Dr. Bonnie White, Professor and Graduate Program Officer in the Department of Curriculum and Teaching at Auburn University. You were selected as a participant because you are currently a member of NALS . . . The Association for Legal Professionals. I, too, am a member of NALS and have been given permission by the Board of Directors to conduct this study.

If you decide to participate, it will take approximately 20 minutes to complete the survey. You are receiving a survey and a return envelope that is preaddressed and stamped. Although there are no guarantees of personal benefit by participating in the study, there is the potential of using the findings to strengthen and improve the training of the legal support staff in the United States.

Any information obtained in connection with this study will remain anonymous. Information collected through your participation may be used as partial fulfillment of the requirements for the Degree of Doctorate of Education and future publications. The NALS Board of Directors will receive a complete report of the findings. This report will be in aggregate form only. No individual information will be included. The ONLY purpose of the coding on the envelope is for follow-up of non-returned surveys. **If you choose not to participate in the research study, please return the blank survey as indication of your non-participation. If you choose to participate, please return the completed survey by date unknown at this time.**

Your decision whether or not to participate will not jeopardize your future relations with Auburn University or the Department of Curriculum and Teaching.

If you have any questions, you may contact Lois I. Cox at (850) 477-9366 (loiscox@mindspring.com) or Dr. Bonnie White at (334) 844-3800 (whitebj@auburn.edu). We will be happy to answer them.

For more information regarding your rights as a research participant you may contact the Office of Human Subjects Research by phone or email. The people to contact there are Executive Director E. N. "Chip" Burson (334) 844-5966 (bursoen@auburn.edu) or IRB Chair Dr. Peter Grandjean at (334) 844-1462 (grandpw@auburn.edu).

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.



Lois I. Cox, Principal Investigator
Doctoral Candidate

HUMAN SUBJECTS
OFFICE OF RESEARCH
PROJECT # 03-150 EX 0308
APPROVED 8/18/03 TO 8/17/04

APPENDIX F

INITIAL SURVEY

Legal Secretary/Paralegal Job Competencies Survey
for Members of
NALS . . . the Association for Legal Professionals

Please return by
October 3, 2003

The purpose of this study is to identify current job competencies required for employment as a legal secretary or paralegal.

A **legal secretary** is defined as someone who may:

- Perform the office administration duties for one or more attorneys.
- Keyboard a variety of documents.
- Handle business communication of all types.
- Ensure that all legal deadlines are met.
- Perform paralegal—or legal assistant—duties.

A **paralegal/legal assistant** is defined by the American Bar Association as:

a person, qualified by education, training, or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible. (Definition adopted by the NALS Board of Directors in July 2002.)

If you are not employed as a legal secretary or paralegal, you are still encouraged to complete this survey. Your responses should be based upon the job you presently hold. Having each questionnaire returned will be extremely helpful to this study. Please return the survey by **DEADLINE** although it may be incomplete.

Directions: Please circle ONE answer for each of the following questions and answer every question.

1. Which term best describes your main job responsibility?

- (1) Legal Secretary
- (2) Paralegal/Legal Assistant
- (3) Judge
- (4) Educator (please circle one):
 Secondary Postsecondary
- (5) Lawyer
- (6) Office Manager
- (7) Law Librarian
- (8) File Clerk
- (9) Receptionist
- (10) Other _____
 Please specify

2. What is the number of people to whom you are responsible? (If more than one firm employs you, please answer based upon the firm where you work the most.)

- (1) _____
- (2) Not applicable

3. In which of the following NALS regions do you reside?

- (1) Region 1 CT, ME, MA, NH, NY, RI, VT
- (2) Region 2 DC, DE, MD, NJ, PA, VA
- (3) Region 3 IL, IN, KY, MI, OH, WV
- (4) Region 4 AL, FL, GA, NC, SC, TN
- (5) Region 5 IA, KS, MN, NE, ND, SD, WI
- (6) Region 6 AR, LA, MO, MS, OK, TX
- (7) Region 7 AK, ID, MT, OR, WA, WY
- (8) Region 8 AZ, CA, CO, HI, NV, NM, UT

4. How many attorneys are employed by your firm? (If more than one firm employs you, please answer based upon the firm where you work the most.)

- (1) _____
- (2) Not applicable

5. What is your age? _____

6. What is your gender?

- (1) Male (2) Female

— Continued on the following page. —

7. Have you attained professional certification?

___ No. If no, are you planning to work toward certification in the future?

___ No

___ Yes _____

Please specify

___ Yes. Circle all that apply.

- (1) ALS—the basic certification for legal professionals
- (2) PLS—the advanced certification for legal professionals
- (3) Certified Legal Assistant (CLA) also known as Certified Paralegal (CP)
- (4) CLA Specialty Certification (one or more)
- (5) Certified Professional Secretary (CPS)
- (6) Other _____

Please specify

8. What is the highest educational level you have completed?

- (1) High school
- (2) Some college/vocational-technical training
- (3) Two-year associate degree
- (4) Bachelor's degree
- (5) Master's degree
- (6) Other _____

Please specify

9. Have you obtained a paralegal degree from a college or university?

- (1) Yes, a one-year diploma
- (2) Yes, an associate degree
- (3) Yes, a four-year degree with a paralegal minor
- (4) Yes, a post-secondary degree
- (5) Yes, a master's degree
- (6) No, I have not obtained a paralegal degree.

10. Which type of computer is used in your office?

- (1) IBM-compatible (PCs)
- (2) Macintosh
- (3) Both

11. Which best describes the type of law firm where you are employed? (If more than one firm employs you, please answer based upon the firm where you work the most.)

- (1) Private
- (2) Corporate
- (3) Government
- (4) Legal Aid
- (5) Other _____
- (6) Not applicable

Please specify

12. How many years have you worked:

(a) at your present firm? (b) in a legal office?

(1) _____ (1) _____

(2) Not applicable (2) Not applicable

13. Approximately how many hours do you work each week in a legal office as:

(a) a legal secretary? (b) a paralegal?

(1) _____ (1) _____

(2) Not applicable (2) Not applicable

(c) other?

Job title _____

(1) _____

(2) Not applicable

14. Do you perceive that your region has a shortage of qualified:

(a) legal secretaries? (b) paralegals?

(1) Yes (1) Yes

(2) No (2) No

(3) Unknown (3) Unknown

(c) others?

Please specify: _____

(1) Yes

(2) No

(3) Unknown

— Continued on the following page. —

Directions: Please rate your perceptions regarding the importance of the following job competencies based upon your personal experience in the legal office. If you are not employed as a legal secretary or paralegal, complete the following section based upon your perceptions for the requirements for your current position.

Please use this scale for rating each job competency:

4 (AE) ABSOLUTELY ESSENTIAL
 3 (VI) VERY IMPORTANT
 2 (SI) SOMEWHAT IMPORTANT
 1 (NI) NOT IMPORTANT

Please circle only ONE number in the column at the right for each competency. Please answer each question.

| Personal Competencies | AE | VI | SI | NI |
|-------------------------------------------------|----|----|----|----|
| 1. Attend seminars or meetings | 4 | 3 | 2 | 1 |
| 2. Encourage professional development of others | 4 | 3 | 2 | 1 |
| 3. Join professional organizations | 4 | 3 | 2 | 1 |
| 4. Maintain a professional appearance | 4 | 3 | 2 | 1 |
| 5. Possess high ethical standards | 4 | 3 | 2 | 1 |
| 6. Possess leadership skills | 4 | 3 | 2 | 1 |
| 7. Upgrade skills as technologies change | 4 | 3 | 2 | 1 |
| 8. Work well as a team member | 4 | 3 | 2 | 1 |

| Communication Competencies | AE | VI | SI | NI |
|-----------------------------------------------------------------|----|----|----|----|
| 9. Compose letters and memorandums | 4 | 3 | 2 | 1 |
| 10. Compose litigation and/or nonlitigation documents | 4 | 3 | 2 | 1 |
| 11. Deal with international clients or firms | 4 | 3 | 2 | 1 |
| 12. Possess a comprehensive legal vocabulary | 4 | 3 | 2 | 1 |
| 13. Possess a comprehensive medical vocabulary | 4 | 3 | 2 | 1 |
| 14. Possess bilingual skills | 4 | 3 | 2 | 1 |
| 15. Possess effective grammar, spelling, and punctuation skills | 4 | 3 | 2 | 1 |
| 16. Possess effective speaking skills | 4 | 3 | 2 | 1 |

| Office Competencies | AE | VI | SI | NI |
|--------------------------------------------------------------------------|----|----|----|----|
| 17. Conduct research using the law library or CD-ROMs (not the Internet) | 4 | 3 | 2 | 1 |
| 18. Keyboard with accuracy | 4 | 3 | 2 | 1 |
| 19. Keyboard with speed | 4 | 3 | 2 | 1 |
| 20. Organize and maintain a filing system | 4 | 3 | 2 | 1 |
| 21. Perform bookkeeping/accounting tasks (other than payroll records) | 4 | 3 | 2 | 1 |
| 22. Prepare payroll records | 4 | 3 | 2 | 1 |
| 23. Select office equipment (other than computers) | 4 | 3 | 2 | 1 |
| 24. Use a typewriter | 4 | 3 | 2 | 1 |

| Computer Competencies | AE | VI | SI | NI |
|--------------------------------------------------|----|----|----|----|
| 25. Conduct research on the Internet | 4 | 3 | 2 | 1 |
| 26. Design and/or maintain an Internet web site | 4 | 3 | 2 | 1 |
| 27. File court documents electronically | 4 | 3 | 2 | 1 |
| 28. Install computer software | 4 | 3 | 2 | 1 |
| 29. Select software and/or hardware for purchase | 4 | 3 | 2 | 1 |
| 30. Use calendaring/docketing software | 4 | 3 | 2 | 1 |
| 31. Use case management software | 4 | 3 | 2 | 1 |
| 32. Use desktop publishing software | 4 | 3 | 2 | 1 |
| 33. Use financial/accounting software | 4 | 3 | 2 | 1 |
| 34. Use presentation software | 4 | 3 | 2 | 1 |
| 35. Use time and billing software | 4 | 3 | 2 | 1 |
| 36. Use voice recognition software | 4 | 3 | 2 | 1 |
| 37. Use word processing software | 4 | 3 | 2 | 1 |

| Information Processing Competencies | AE | VI | SI | NI |
|--------------------------------------------------------|----|----|----|----|
| 38. Enter data on printed forms | 4 | 3 | 2 | 1 |
| 39. Keyboard documents | 4 | 3 | 2 | 1 |
| 40. Revise/ material input by voice recognition | 4 | 3 | 2 | 1 |
| 41. Revise material keyboarded by others | 4 | 3 | 2 | 1 |
| 42. Record and prepare meeting minutes | 4 | 3 | 2 | 1 |
| 43. Transcribe from cassette dictation | 4 | 3 | 2 | 1 |
| 44. Transcribe from shorthand/speedwriting notes | 4 | 3 | 2 | 1 |
| 45. Use shorthand/speedwriting skills for taking notes | 4 | 3 | 2 | 1 |

— Continued on the following page. —

The following questions relate to the type of computer software you currently have in your office. Which software applications do you use on a weekly basis? You may select MORE THAN ONE answer for each question, and please answer every question.

1. Word Processing

- (1) Word Version _____
 (2) WordPerfect Version _____
 (3) Both
 (4) Other _____
 Please specify
 (5) Not applicable

2. Presentation

- (1) PowerPoint
 (2) TimeMap
 (3) TrialDirector
 (4) Other _____
 Please specify
 (5) Not applicable

3. Online Research

- (1) FindLaw
 (2) LexisNexis
 (3) Westlaw
 (4) Other _____
 Please specify
 (5) Not applicable

4. Desktop Publishing

- (1) InDesign Version _____
 (2) PageMaker Version _____
 (3) QuarkXpress Version _____
 (4) Other _____
 Please specify
 (5) Not applicable

5. Case Management

- (1) AbacusLaw
 (2) Amicus Attorney
 (3) Time Matters
 (4) Other _____
 Please specify
 (5) Not applicable

6. Calendaring/Docketing

- (1) CompuLaw
 (2) Elite
 (3) PracticeMaster
 (4) Other _____
 Please specify
 (5) Not applicable

7. Time and Billing

- (1) PCLaw
 (2) QuickBooks Pro
 (3) TABS III
 (4) Timeslips
 (5) Other _____
 Please specify
 (6) Not applicable

8. Voice Recognition

- (1) Dragon Naturally Speaking
 (2) IBM ViaVoice
 (3) L&H VoiceXpress
 (4) Other _____
 Please specify
 (5) Not applicable
-

This is the end of the survey. Please return your survey in the enclosed pre-addressed envelope by OCTOBER 3, 2003. If the pre-addressed envelope is unavailable, the survey may be mailed to Lois I. Cox; Apartment 242; 5500 Rawson Lane; Pensacola, FL 32503. My telephone number is 850-477-9366, and my e-mail address is loiscox@mindspring.com. Thank you for completing this survey.

— This is the end of the survey. —

APPENDIX G

SECOND POSTCARD

You recently received a questionnaire in which the job characteristics of legal secretaries and paralegals are being identified. If you have completed the survey and returned it, thank you so much.

If you have not yet returned your survey, please take approximately 20 minutes and complete it. Without your unique perspective, valuable information may not be discovered.

If you do not wish to participate, please return the survey in the preaddressed envelope so that you do not receive another one in the follow-up mailing.

The deadline for returning the survey is October 3, 2003.

Miss Lois Cox

850-477-9366

loiscox@mindspring.com

APPENDIX H

FOLLOW-UP INFORMATION LETTER

Auburn University

Auburn University, Alabama 36849-5212

Curriculum and Teaching
College of Education
5040 Haley Center

Telephone: (334) 844-4434
Fax: (334) 844-6789

FOLLOW-UP INFORMATION SHEET
FOR

*Job Competencies of Legal Secretaries and Paralegals as Perceived by Selected Members of
NALS . . . The Association for Legal Professionals with Implications for Curricular Development*

Current Date

Name
Address 1
Address 2

Dear Name:

A few weeks ago you were asked to participate in a nationwide study to determine the current job competencies needed by the successful legal secretary or paralegal. I have not yet received your completed survey.

If you have recently completed the survey and returned it, thank you very much. If you have not yet mailed the survey, please complete it and return it in the enclosed postage-paid envelope. Your participation is still encouraged even if you have never been employed as a legal secretary or paralegal. Without your unique perspective the findings of this study will not be complete.

This study is being conducted by Miss Lois I. Cox, a doctoral candidate, under the supervision of Dr. Bonnie White, Professor and Graduate Program Officer in the Department of Curriculum and Teaching at Auburn University. You were selected as a participant because you are currently a member of NALS . . . The Association for Legal Professionals. I, too, am a member of NALS and have been given permission by the Board of Directors to conduct this study.

If you decide to participate, it will take approximately 20 minutes to complete the survey. You are receiving a survey and a return envelope that is preaddressed and stamped. Although there are no guarantees of personal benefit by participating in the study, there is the potential of using the findings to strengthen and improve the training of the legal support staff in the United States.

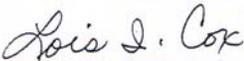
Any information obtained in connection with this study will remain anonymous. Information collected through your participation may be used as partial fulfillment of the requirements for the Degree of Doctorate of Education and future publications. The NALS Board of Directors will receive a complete report of the findings. This report will be in aggregate form only. No individual information will be included. The ONLY purpose of the coding on the envelope is for follow-up of non-returned surveys. **If you choose not to participate in the research study, please return the blank survey as indication of your non-participation. If you choose to participate, please return the completed survey by date unknown at this time.**

Your decision whether or not to participate will not jeopardize your future relations with Auburn University or the Department of Curriculum and Teaching.

If you have any questions, you may contact Lois I. Cox at (850) 477-9366 (loiscox@mindspring.com) or Dr. Bonnie White at (334) 844-3800 (whitebj@auburn.edu). We will be happy to answer them.

For more information regarding your rights as a research participant you may contact the Office of Human Subjects Research by phone or email. The people to contact there are Executive Director E. N. "Chip" Burson (334) 844-5966 (bursoen@auburn.edu) or IRB Chair Dr. Peter Grandjean at (334) 844-1462 (grandpw@auburn.edu).

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.



Lois I. Cox, Principal Investigator
Doctoral Candidate

HUMAN SUBJECTS
OFFICE OF RESEARCH
PROJECT #03-150 EX 0308
APPROVED 8/18/03 TO 8/17/04

A LAND-GRANT UNIVERSITY

7. Have you attained professional certification?

___ No. If no, are you planning to work toward certification in the future?

___ No

___ Yes _____

Please specify

___ Yes. Circle all that apply.

- (1) ALS—the basic certification for legal professionals
- (2) PLS—the advanced certification for legal professionals
- (3) Certified Legal Assistant (CLA) also known as Certified Paralegal (CP)
- (4) CLA Specialty Certification (one or more)
- (5) Certified Professional Secretary (CPS)
- (6) Other _____

Please specify

8. What is the highest educational level you have completed?

- (1) High school
- (2) Some college/vocational-technical training
- (3) Two-year associate degree
- (4) Bachelor's degree
- (5) Master's degree
- (6) Other _____

Please specify

9. Have you obtained a paralegal degree from a college or university?

- (1) Yes, a one-year diploma
- (2) Yes, an associate degree
- (3) Yes, a four-year degree with a paralegal minor
- (4) Yes, a post-secondary degree
- (5) Yes, a master's degree
- (6) No, I have not obtained a paralegal degree.

10. Which type of computer is used in your office?

- (1) IBM-compatible (PCs)
- (2) Macintosh
- (3) Both

11. Which best describes the type of law firm where you are employed? (If more than one firm employs you, please answer based upon the firm where you work the most.)

- (1) Private
- (2) Corporate
- (3) Government
- (4) Legal Aid
- (5) Other _____
- (6) Not applicable

Please specify

12. How many years have you worked:

(a) at your present firm? (b) in a legal office?

- (1) _____ (1) _____
- (2) Not applicable (2) Not applicable

13. Approximately how many hours do you work each week in a legal office as:

(a) a legal secretary? (b) a paralegal?

- (1) _____ (1) _____
- (2) Not applicable (2) Not applicable

(c) other?

Job title _____

- (1) _____
- (2) Not applicable

14. Do you perceive that your region has a shortage of qualified:

(a) legal secretaries? (b) paralegals?

- (1) Yes (1) Yes
- (2) No (2) No
- (3) Unknown (3) Unknown

(c) others?

Please specify: _____

- (1) Yes
- (2) No
- (3) Unknown

— Continued on the following page. —

Directions: Please rate your perceptions regarding the importance of the following job competencies based upon your personal experience in the legal office. If you are not employed as a legal secretary or paralegal, complete the following section based upon your perceptions for the requirements for your current position.

Please use this scale for rating each job competency:

4 (AE) ABSOLUTELY ESSENTIAL
 3 (VI) VERY IMPORTANT
 2 (SI) SOMEWHAT IMPORTANT
 1 (NI) NOT IMPORTANT

Please circle only ONE number in the column at the right for each competency. Please answer each question.

| Personal Competencies | AE | VI | SI | NI |
|-------------------------------------------------|-----------|-----------|-----------|-----------|
| 1. Attend seminars or meetings | 4 | 3 | 2 | 1 |
| 2. Encourage professional development of others | 4 | 3 | 2 | 1 |
| 3. Join professional organizations | 4 | 3 | 2 | 1 |
| 4. Maintain a professional appearance | 4 | 3 | 2 | 1 |
| 5. Possess high ethical standards | 4 | 3 | 2 | 1 |
| 6. Possess leadership skills | 4 | 3 | 2 | 1 |
| 7. Upgrade skills as technologies change | 4 | 3 | 2 | 1 |
| 8. Work well as a team member | 4 | 3 | 2 | 1 |

| Communication Competencies | AE | VI | SI | NI |
|-----------------------------------------------------------------|-----------|-----------|-----------|-----------|
| 9. Compose letters and memorandums | 4 | 3 | 2 | 1 |
| 10. Compose litigation and/or nonlitigation documents | 4 | 3 | 2 | 1 |
| 11. Deal with international clients or firms | 4 | 3 | 2 | 1 |
| 12. Possess a comprehensive legal vocabulary | 4 | 3 | 2 | 1 |
| 13. Possess a comprehensive medical vocabulary | 4 | 3 | 2 | 1 |
| 14. Possess bilingual skills | 4 | 3 | 2 | 1 |
| 15. Possess effective grammar, spelling, and punctuation skills | 4 | 3 | 2 | 1 |
| 16. Possess effective speaking skills | 4 | 3 | 2 | 1 |

| Office Competencies | AE | VI | SI | NI |
|--------------------------------------------------------------------------|-----------|-----------|-----------|-----------|
| 17. Conduct research using the law library or CD-ROMs (not the Internet) | 4 | 3 | 2 | 1 |
| 18. Keyboard with accuracy | 4 | 3 | 2 | 1 |
| 19. Keyboard with speed | 4 | 3 | 2 | 1 |
| 20. Organize and maintain a filing system | 4 | 3 | 2 | 1 |
| 21. Perform bookkeeping/accounting tasks (other than payroll records) | 4 | 3 | 2 | 1 |
| 22. Prepare payroll records | 4 | 3 | 2 | 1 |
| 23. Select office equipment (other than computers) | 4 | 3 | 2 | 1 |
| 24. Use a typewriter | 4 | 3 | 2 | 1 |

| Computer Competencies | AE | VI | SI | NI |
|--------------------------------------------------|-----------|-----------|-----------|-----------|
| 25. Conduct research on the Internet | 4 | 3 | 2 | 1 |
| 26. Design and/or maintain an Internet web site | 4 | 3 | 2 | 1 |
| 27. File court documents electronically | 4 | 3 | 2 | 1 |
| 28. Install computer software | 4 | 3 | 2 | 1 |
| 29. Select software and/or hardware for purchase | 4 | 3 | 2 | 1 |
| 30. Use calendaring/docketing software | 4 | 3 | 2 | 1 |
| 31. Use case management software | 4 | 3 | 2 | 1 |
| 32. Use desktop publishing software | 4 | 3 | 2 | 1 |
| 33. Use financial/accounting software | 4 | 3 | 2 | 1 |
| 34. Use presentation software | 4 | 3 | 2 | 1 |
| 35. Use time and billing software | 4 | 3 | 2 | 1 |
| 36. Use voice recognition software | 4 | 3 | 2 | 1 |
| 37. Use word processing software | 4 | 3 | 2 | 1 |

| Information Processing Competencies | AE | VI | SI | NI |
|--------------------------------------------------------|-----------|-----------|-----------|-----------|
| 38. Enter data on printed forms | 4 | 3 | 2 | 1 |
| 39. Keyboard documents | 4 | 3 | 2 | 1 |
| 40. Revise/ material input by voice recognition | 4 | 3 | 2 | 1 |
| 41. Revise material keyboarded by others | 4 | 3 | 2 | 1 |
| 42. Record and prepare meeting minutes | 4 | 3 | 2 | 1 |
| 43. Transcribe from cassette dictation | 4 | 3 | 2 | 1 |
| 44. Transcribe from shorthand/speedwriting notes | 4 | 3 | 2 | 1 |
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— Continued on the following page. —

The following questions relate to the type of computer software you currently have in your office. Which software applications do you use on a weekly basis? You may select MORE THAN ONE answer for each question, and please answer every question.

1. Word Processing

- (1) Word Version _____
 (2) WordPerfect Version _____
 (3) Both
 (4) Other _____
 Please specify
 (5) Not applicable

2. Presentation

- (1) PowerPoint
 (2) TimeMap
 (3) TrialDirector
 (4) Other _____
 Please specify
 (5) Not applicable

3. Online Research

- (1) FindLaw
 (2) LexisNexis
 (3) Westlaw
 (4) Other _____
 Please specify
 (5) Not applicable

4. Desktop Publishing

- (1) InDesign Version _____
 (2) PageMaker Version _____
 (3) QuarkXpress Version _____
 (4) Other _____
 Please specify
 (5) Not applicable

5. Case Management

- (1) AbacusLaw
 (2) Amicus Attorney
 (3) Time Matters
 (4) Other _____
 Please specify
 (5) Not applicable

6. Calendaring/Docketing

- (1) CompuLaw
 (2) Elite
 (3) PracticeMaster
 (4) Other _____
 Please specify
 (5) Not applicable

7. Time and Billing

- (1) PCLaw
 (2) QuickBooks Pro
 (3) TABS III
 (4) Timeslips
 (5) Other _____
 Please specify
 (6) Not applicable

8. Voice Recognition

- (1) Dragon Naturally Speaking
 (2) IBM ViaVoice
 (3) L&H VoiceXpress
 (4) Other _____
 Please specify
 (5) Not applicable
-

This is the end of the survey. Please return your survey in the enclosed pre-addressed envelope by NOVEMBER 24, 2003. If the pre-addressed envelope is unavailable, the survey may be mailed to Lois I. Cox; Apartment 242; 5500 Rawson Lane; Pensacola, FL 32503. My telephone number is 850-477-9366, and my e-mail address is loiscox@mindspring.com. Thank you for completing this survey.

— This is the end of the survey. —

APPENDIX J

SOFTWARE USE BY LEGAL SECRETARIES AND PARALEGALS

Table J1

Word Processing Software Use by Legal Secretaries and Paralegals

| Word processing software | Legal secretary | | Paralegal | |
|--------------------------|-----------------|-------|-----------|-------|
| | <i>f</i> | % | <i>f</i> | % |
| Word | 49 | 44.6 | 19 | 31.7 |
| WordPerfect | 16 | 14.5 | 19 | 31.7 |
| Both | 41 | 37.3 | 20 | 33.2 |
| Not applicable | 2 | 1.8 | 1 | 1.7 |
| Did not respond | 2 | 1.8 | 1 | 1.7 |
| Totals | 110 | 100.0 | 60 | 100.0 |

Table J2

Presentation Software Use by Legal Secretaries and Paralegals

| Presentation software | Legal secretary | | Paralegal | |
|-----------------------|-----------------|-------|-----------|-------|
| | <i>f</i> | % | <i>f</i> | % |
| PowerPoint | 48 | 43.6 | 18 | 30.0 |
| HotDocs | 1 | 0.9 | 0 | 0.0 |
| Doer Presentation | 0 | 0.0 | 1 | 1.6 |
| Not applicable | 55 | 50.0 | 37 | 61.7 |
| Did not respond | 6 | 5.5 | 4 | 6.7 |
| Totals | 110 | 100.0 | 60 | 100.0 |

Table J3

Desktop Publishing Software Use by Legal Secretaries and Paralegals

| Desktop publishing | Legal secretary | | Paralegal | |
|--------------------|-----------------|-------|-----------|-------|
| | <i>f</i> | % | <i>f</i> | % |
| InDesign | 0 | 0.0 | 0 | 0.0 |
| PageMaker | 4 | 3.6 | 2 | 3.3 |
| QuarkXpress | 0 | 0.0 | 0 | 0.0 |
| Other | 2 | 1.8 | 2 | 3.3 |
| Not applicable | 96 | 87.3 | 53 | 88.4 |
| Did not respond | 8 | 7.3 | 3 | 5.0 |
| Totals | 110 | 100.0 | 60 | 100.0 |

Table J4

Case Management Software Use by Legal Secretaries and Paralegals

| Case management | Legal secretary | | Paralegal | |
|-----------------|-----------------|-------|-----------|-------|
| | <i>f</i> | % | <i>f</i> | % |
| AbacusLaw | 3 | 2.7 | 4 | 6.7 |
| Amicus Attorney | 2 | 1.8 | 3 | 5.0 |
| Time Matters | 10 | 9.1 | 11 | 18.3 |
| Other | 22 | 20.0 | 14 | 23.3 |
| Not applicable | 67 | 60.9 | 27 | 45.0 |
| Did not respond | 6 | 5.5 | 1 | 1.7 |
| Totals | 110 | 100.0 | 60 | 100.0 |

Table J5

Calendaring/Docketing Software Use by Legal Secretaries and Paralegals

| Calendaring/docketing software | Legal secretary | | Paralegal | |
|--------------------------------|-----------------|-------|-----------|-------|
| | <i>f</i> | % | <i>f</i> | % |
| Elite | 11 | 10.0 | 1 | 1.7 |
| Outlook | 18 | 16.4 | 8 | 13.3 |
| Time Matters | 1 | 0.9 | 4 | 6.7 |
| Other | 30 | 27.3 | 29 | 48.3 |
| Not applicable | 45 | 40.9 | 15 | 25.0 |
| Did not respond | 5 | 4.5 | 3 | 5.0 |
| Totals | 110 | 100.0 | 60 | 100.0 |

Table J6

Time and Billing Software Use by Legal Secretaries and Paralegals

| Time and billing software | Legal secretary | | Paralegal | |
|---------------------------|-----------------|-------|-----------|-------|
| | <i>f</i> | % | <i>f</i> | % |
| DTE | 10 | 9.1 | 2 | 3.3 |
| Elite | 8 | 7.3 | 2 | 3.3 |
| PCLaw | 1 | 0.9 | 5 | 8.3 |
| QuickBooks Pro | 5 | 4.5 | 5 | 8.3 |
| TABS III | 5 | 4.5 | 4 | 6.7 |
| TimeSlips | 9 | 8.2 | 15 | 25.0 |
| Other | 35 | 31.8 | 7 | 11.8 |
| Not applicable | 31 | 28.2 | 18 | 30.0 |
| Did not respond | 6 | 5.5 | 2 | 3.3 |
| Totals | 110 | 100.0 | 60 | 100.0 |

Table J7

Voice Recognition Software Use by Legal Secretaries and Paralegals

| Voice recognition | Legal secretary | | Paralegal | |
|---------------------------|-----------------|-------|-----------|-------|
| | <i>f</i> | % | <i>f</i> | % |
| Dragon Naturally Speaking | 2 | 1.8 | 2 | 3.3 |
| IBM ViaVoice | 1 | 0.9 | 1 | 1.7 |
| L&H VoiceXpress | 0 | 0.0 | 0 | 0.0 |
| Other | 3 | 2.7 | 0 | 0.0 |
| Not applicable | 97 | 88.2 | 54 | 90.0 |
| Did not respond | 7 | 6.4 | 3 | 5.0 |
| Totals | 110 | 100.0 | 60 | 100.0 |

Table J8

Online Research Use by Legal Secretaries and Paralegals

| Online research | Legal secretary (n = 110) | | Paralegal (n = 60) | |
|-----------------|------------------------------|-------|-----------------------|-------|
| | <i>f</i> | % | <i>f</i> | % |
| Westlaw | 45 | 40.9 | 29 | 48.3 |
| LexisNexis | 36 | 32.7 | 19 | 31.7 |
| FindLaw | 9 | 8.2 | 5 | 8.3 |
| Other | 3 | 2.73 | 2 | 3.3 |
| Not applicable | 37 | 33.6 | 13 | 21.7 |
| Did not respond | 6 | 5.5 | 2 | 3.3 |
| Totals* | 136 | 100.0 | 70 | 100.0 |

Note. Each respondent could select more than one online research service.