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“Legal research” is not merely a search for information; it is primarily a struggle for understanding.¹

Legal research is more than just an aptitude, it’s an attitude.²

I. Introduction

The law is the foundation upon which all arguments are built; legal research requires finding the foundation for those arguments. In the ever growing movement to integrate “skills and values” across the curriculum,³ a critical component to this curriculum redesign is research instruction.⁴ Research


³. RESEARCH SKILLS FOR LAWYERS AND LAW STUDENTS 3 (Thomson/West, white paper 2007) [hereinafter RESEARCH SKILLS]; Byron D. Cooper, The Integration of Theory, Doctrine, and Practice in Legal Education, 1 J. ASS’N LEGAL WRITING DIRECTORS 50, 50 (2002) (mentioning over five years ago “the effort to integrate theory and practice in American law schools has been gathering momentum”); see Matthew C. Cordon, Beyond Mere Competency: Advanced Legal Research in a Practice-Oriented Curriculum, 55 BAYLOR L. REV. 1, 3 (2003) (“Improvement in legal research instruction has coincided with a rather spirited debate regarding the role of law schools as training grounds for training lawyers, not merely as graduate schools teaching about the theory of law.”). The integration of skills-and-values-across-the-curriculum discussion resulted in two books: ROY STUCKEY ET AL., BEST PRACTICES FOR LEGAL EDUCATION: A VISION AND A ROAD MAP (2007), and WILLIAM M. SULLIVAN ET AL., EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW (2007). The topic of integrating skills and values into the law school curriculum has resulted in discussions at the institutional, state, regional, and national levels.

⁴. In his recent article discussing the book Educating Lawyers, Richard A. Leiter, Law Library Director at the University of Nebraska-Lincoln, argued that “[l]egal research is rarely mentioned as a lawyering skill.” Richard A. Leiter, The Missing Lawyering Skill, AALL Spectrum, July 2008, at 22, 22 (discussing SULLIVAN ET AL., supra note 3). Leiter explained why legal research was not part of the discussion in Educating Lawyers—the authors give the
serves as the fulcrum upon which “skills and values,” such as ethics and practical application of doctrinal studies, rests.\(^5\)

And for the most part, other courses in the law school curriculum omit discussion of research skills.\(^5\) “No research” is the norm because the students purchase casebooks that already contain the cases the students will be assigned to read,\(^7\) exams for the most part are closed book (and if they are open-book, impression “that the simple act of reading cases and analyzing them imparts legal research skills.” \(\text{Id.}\) (discussing SULLIVAN ET AL., supra note 3). Learning and developing research skills requires much more than reading and analyzing cases; the law student or attorney must know how to find the cases first.


6. See ROBERT C. BERRING & ELIZABETH A. EDDINGER, FINDING THE LAW 4 (12th ed. 2005) (stating that “[r]arely does a casebook require the student to read external materials, and when the students in a first year law school class are assigned outside reading, it is usually put on reserve in the law library,” which means that the students do not need to do any research to obtain the “outside” reading); Davalene Cooper, Adopting the “Stepchild” into the Legal Academic Community: Creating a Program for Learning Legal Research Skills, in EXPERT VIEWS ON IMPROVING THE QUALITY OF LEGAL RESEARCH EDUCATION IN THE UNITED STATES 11, 13 (West Pub’g Co. 1992) [hereinafter EXPERT VIEWS] (discussing how historically, skills training was not part of legal education, but acknowledging that the shift towards incorporating skills-based education was beginning); Robert C. Berring, Collapse of the Structure of the Legal Research Universe: The Imperative of Digital Information, 69 WASH. L. REV. 9, 32 (1994) (remarking that fifteen years ago, Professor Berring was amazed that “law students still read casebooks, desiccated to collections of appellate opinions”); Thomas A. Woxland, Why Can’t Johnny Research? Or It All Started with Christopher Columbus Langdell, 81 LAW LIBR. J. 451, 456–57 (1989) (stating that “the case method, in concert with its bibliographical offspring—the casebook—has made library research (and thus the learning of research skills) largely irrelevant in modern legal education” (emphasis added), and discussing how the casebooks gather all the necessary material into one book).

The “substantive” courses in law school “train[ ] the student[s] to recognize the legal issues confronted in practice on a day-to-day basis.” BONITA K. ROBERTS & LINDA L. SCHLUETER, LEGAL RESEARCH GUIDE: PATTERNS AND PRACTICE 1 (3d ed. 1996). However, “[a]n equally important task . . . is to locate the sources of that substantive law.” \(\text{Id.}\)

7. Robin K. Mills, Legal Research Instruction in Law Schools, The State of the Art or, Why Law School Graduates Do Not Know How to Find the Law, 70 LAW LIBR. J. 343, 343 (1977); Sandra Sadow & Benjamin R. Beede, Library Instruction in American Law Schools, 68 LAW LIBR. J. 27, 30 (1975). And when a student starts clerking at a law firm, there is not a casebook available that provides the background of the law, the fact patterns, and the applicable cases for a specific client. PARTNERSHIP AND SOLUTIONS FOR PREPARING JOB-READY ATTORNEYS 10 (Thomson/West, white paper July 2008) [hereinafter PARTNERSHIP AND SOLUTIONS]; see Carol L. Golden, Teaching Legal Research as an Integral Step in Legal Problem Solving, in EXPERT VIEWS, supra note 6, at 37, 39 (mentioning that some students and first-year associates will consult their old casebooks as “a starting point for conducting legal research.” This is not always a wise thing to do.).

the students are using the casebook, rule book, outlines, or other notes, and not researching in terms of searching the library), and the bar examination is closed book, even for the states that have the multistate performance test exam (MPT). Legal education is “no research” education because “‘a first-year law student [can] navigate through the common law courses that make up the first year of law school without doing any real research at all.’” The availability of casebooks eliminates the need for students to go to the library that during closed-book law school exams, students are simply drawing on what they already know. If attorneys did not conduct legal research and only relied on what they remembered about the law, this would not be a good situation. Society of American Law Teachers Statement on the Bar Exam, 52 J. LEGAL EDUC. 446, 447 (2002) [hereinafter Statement on Bar Exam].

9. Whisner, supra note 8, at 393 (discussing how students prepare by using resources and materials required for the course; very limited research skills are used or required).

10. Id.

11. Steven M. Barkan, Should Legal Research Be Included on the Bar Exam? An Exploration of the Question, 99 LAW LIBR. J. 403, 410 (2007); Nat’l Conference of Bar Exam’rs, Description of the MPT, http://www.ncbex.org/multistate-tests/mpt/mpt-faqs/description1/ (last visited Aug. 13, 2008) (discussing how students are given a File and a Library; the Library contains the sources that the students are to use during the MPT “some of which may not be relevant to the assigned lawyering task,” but the Library “provide[s] sufficient substantive information to complete the task”; therefore, no outside research is necessary); see Terrence R. White, National Bar Exam for Idaho???, 51 THE ADVOC. (IDAHO), Mar.–Apr. 2008, at 6 (stating that the MPT tests “fundamental skills in a realistic situation,” but in the real world, an attorney is not given a “Library”); Nat’l Conference of Bar Exam’rs, Skills Tested by the MPT, http://www.ncbex.org/multistate-tests/mpt/mpt-faqs/skills-tested/ (last visited Aug. 13, 2008) (listing the six skills tested by the MPT: problem solving, legal analysis and reasoning, factual analysis, communication, organization and management of a legal task, and recognizing and resolving ethical dilemmas; conducting legal research is not one of the skills tested). See generally Am. Bar Ass’n Section of Legal Educ. & Admissions to the Bar, Legal Education and Professional Development—An Educational Continuum, Report of the Task Force on the Law Schools and the Profession: Narrowing the Gap 281–82 (1992) (discussing the pros and cons of the MPT; one of the cons discussed is how the MPT does not test other lawyering skills, like research, that are identified in the MacCrate Report) [hereinafter MacCrate Report]; Andrea A. Curcio, A Better Bar: Why and How the Existing Bar Exam Should Change, 81 NEB. L. REV. 363, 378–79 (2002) (discussing the problems with the MPT and how the MPT may be testing the same skills that are tested in the essay portion of the bar exam). 


13. The term “library” can mean either a physical location, an electronic database, or both.
and conduct research—to actually find the cases on their own—because all of the materials are compiled in the required casebook.  

Furthermore, these casebooks primarily contain appellate decisions, edited to focus the students’ attention on a particular point. In fact, appellate decisions are just a fraction of the available legal resources, and appellate decisions “were never intended by their authors [to be used] as teaching tools.” Actually, no other field of study is taught in this manner.

14. Mills, supra note 7, at 343. Professor Woxland mentioned, It is the casebook itself that has kept many students ignorant of the laboratory; it is the casebook that has obviated the need for library research for most law students. The casebook, by gathering all cases and materials necessary for a course into one volume, has become a substitute for the library. It has condensed and recomplied sources that are scattered throughout dozens of reporters, codes, periodicals, and secondary literature into a portable law library and has freed the student from the need to master even the most basic research skills. Woxland, supra note 6, at 457 (noting that the cases are heavily edited). A survey of law firm librarians from across the United States reported the following response, “Students seemed to be force-fed in law schools—they are given ‘canned’ materials in law school and then they are upset with the real world when it doesn’t provide them with the same service.” Joan S. Howland & Nancy J. Lewis, The Effectiveness of Law School Legal Research Training Programs, 40 J. LEGAL EDUC. 381, 389 (1990) (emphasis added). Professor Woxland said it well when he wrote, “[T]he research skills—such as they are—of the vast majority of students (except those who participate in such extracurricular activities as the law review or moot court) are left to atrophy until the new lawyers begin professional practice.” Woxland, supra note 6, at 455.

15. E.g., BERRING & EDINGER, supra note 6, at 4; Pamela Lysaght, Opening Remarks, 1 J. ASS’N LEGAL WRITING DIRECTORS 1, 1 (2002); Sadow & Beede, supra note 7, at 30. Unlike the substantive courses, in which the rules are provided in the cases that the students read, in legal research and writing classes, the students must conduct research and find the sources that provide the applicable rules. Amy E. Sloan, Erasing Lines: Integrating the Law School Curriculum, 1 J. ASS’N LEGAL WRITING DIRECTORS 3, 5 (2002). Also, the edited cases in the casebooks do not contain West headnotes and other annotations that students will find when conducting research. John D. Edwards, Teaching Legal Research: Evaluating Options, in EXPERT VIEWS, supra note 6, at 29, 39; see BERRING & EDINGER, supra note 6, at 4 (discussing how casebooks are organized in certain ways in order to make certain points).


17. Julie M. Spanbauer, Handout, Reality Bytes or Does It?: Incorporating Learning Theory and Student Expectations into Problem Design for a First-Year Legal Writing Course 1 (Thirteenth Biennial Conference of the Legal Writing Institute, Indianapolis, Ind., July 17, 2008) (materials accompanying presentation on file with author) [hereinafter Spanbauer, Handout].

18. Julie M. Spanbauer, Presentation, Reality Bytes or Does It?: Incorporating Learning Theory and Student Expectations into Problem Design for a First-Year Legal Writing Course (Thirteenth Biennial Conference of the Legal Writing Institute, Indianapolis, Ind., July 17, 2008) (notes on file with author) [hereinafter Spanbauer, Presentation]. Professor Woxland discusses how Christopher Columbus Langdell described the law library of the past as a
Given the “no research” environment of legal education, the road of research instruction, which begins in the first-year legal research and writing courses, must continue across the curriculum in order for the research skills learned by students in the first year to be further developed, refined, and reinforced, and in order to adequately prepare law students for their future careers as attorneys. Building the road of research instruction across the curriculum will bridge the gap between the “no research” environment of law school education and the “research environment” of real world legal practice.

Part II of this article revisits how legal research skills are important to attorneys and discusses how attorneys must have solid research training in law school. Part III discusses the roadblocks that hinder research instruction—both from the perspective of the law students and the perspective of administrators and faculty members at law schools. Part IV of this article explains the “R’s”19 of legal research across the curriculum and how continued research instruction during the second and third years of law school will not only revisit the skills taught during the first year, but also reinforce and re-stress those basic skills and refocus students’ attention on continuing to develop real world research skills at the time when law students can relate to research instruction and understand the importance of efficient research skills.

II. The Importance of Legal Research

Research: “the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.”20

By its nature, the law and its practice are research-based, more so than other professions.21
A. To the Profession

No one doubts the importance of research skills. Attorneys owe a duty to their clients, the judiciary, the administration of justice, and the profession. These duties require an attorney to be competent, as well as prompt and diligent.

The ABA Model Rules of Professional Conduct state that “[i]n all professional functions a lawyer should be competent.”

22. E.g., Michael J. Slinger, Placing the Horse Before the Cart: The Need to Convince Law Firm Partners and Law Professors of the Inadequacy of Legal Research Training at Law Schools as a First Step in Developing a Successful Training Solution, in EXPERT VIEWS, supra note 6, at 91, 92 (“Perhaps more than any other profession, a lawyer’s success is intrinsically tied to his or her ability to perform competent research.”); Barkan, supra note 11, at 403 (“Because law is an information profession, the ability to find both the law and accurate information about the law is crucial to legal problem solving and decision making, and to a lawyer’s ability to function competently.”); Robert J. Brink, What Would Holmes Say Today?, AALL SPECTRUM, Feb. 2008, at 16, 16 (quoting Professor Bob Berring at a session at the 2007 AALL Annual Meeting: “How can one work with the law if one cannot find it?”); Lydia M. V. Brandt, The MacCrate Report and the Teaching of Legal Research: A Justified Scenario for Educational Malpractice, 2 TEX. WESLEYAN L. REV. 123, 127 (1995) (stating “that legal research is an essential lawyering skill” (emphasis added)); Domenick L. Gabrielli, The Importance of Research and Legal Writing in the Law School Education, 46 ALB. L. REV. 1, 1 (1981–1982) (referring to research, and writing skills, as “essential” and “critical”); Mary Whisner & Lea Vaughn, Teaching Legal Research and Writing in Upper-Division Courses: A Retrospective from Two Perspectives, 4 PERSP.: TEACHING LEGAL RES. & WRITING 72, 72 (1996) (stating that the two most valuable skills that students learn in law school are research and writing); Woxland, supra note 6, at 463 (putting legal research “at the heart of legal practice”). Ann Hemmens, reference librarian at the University of Washington School of Law, indicated that there was a “consensus in the legal community that legal research is an important skill for lawyers.” Ann Hemmens, Advanced Legal Research Courses: A Survey of ABA-Accredited Law Schools, 94 LAW LIBR. J. 209, 211 (2002) (emphasis added). Hemmens cited I. Trotter Hardy’s article as an example of why there was not total agreement about the importance of legal research skills. Id. (citing I. Trotter Hardy, Why Legal Research Training Is So Bad: A Response to Howland and Lewis, 41 J. LEGAL EDUC. 221, 222 (1991), which states “How can it be that those who teach research perceive a problem, when those empowered to commit resources to teaching do not? One surprising answer is that legal research may not be all that important.”).

24. Id. at pmbl. ¶¶ 1, 5.
25. Id.

26. Id. at pmbl. ¶ 1.
27. Id. at pmbl. ¶ 4, R. 1.1.
28. Id. at pmbl. ¶ 4, R. 1.3.
29. Id. at pmbl. ¶ 4. Another definition states, “Competence [is] the ability to do something successfully or efficiently.” OXFORD DICTIONARY, supra note 20, at 349. Furthermore, competence refers to “[t]he scope of a person’s . . . knowledge or ability;” “a skill
requires “the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation.” The ability to do legal research is undoubtedly one of the most important skills that a competent attorney must possess.

Research skills and strategies are the foundation of an attorney’s work—whether researching the facts or the law. And as a researcher, competence means that the attorney must be accurate, thorough, efficient, confident, and knowledgeable, and use sound judgment. A competent attorney is one who can design and implement an appropriate research strategy to solve a client’s problem and “conduct research skillfully, finding and analyzing pertinent authorities accurately, quickly, and efficiently.”

30. Model Rules of Prof’l Conduct R. 1.1; see also Christina L. Kunz et al., The Process of Legal Research 5 (7th ed. 2008) (stating that “legal research is central to the ethical obligation that accompanies client representation: service to the legal system”). For a thorough discussion of the definition of “competence” and how a concrete competence standard for legal research is difficult to articulate given the ever evolving, complex legal research environment, see Margolis, supra note 5, at 82, and Marguerite L. Butler, Rule 11-Sanctions and a Lawyer’s Failure to Conduct Competent Legal Research, 29 Cap. U.L. Rev. 681 (2002).

31. Amy E. Sloan, Basic Legal Research: Tools and Strategies 1 (Erwin Chemerinsky et al. eds., 3d ed. 2006) (stating that “being proficient in legal research is essential to [the students’] success in legal practice”); see Model Rules of Prof’l Conduct R. 1.1 (discussing the requisite knowledge and skills that attorneys must have).

32. Leiter, supra note 4, at 25 (asking the following question: “Is it possible for a lawyer to know any law without conducting some sort of legal research at some point in his or her career?”).

33. Toni M. Fine, Do Best Pedagogical Practices in Legal Education Include a Curriculum That Integrates Theory, Skill, and Doctrine?, 1 J. Ass’n Legal Writing Directors 66, 72 (2002) (discussing the importance of fact research, which is a neglected topic in the law school curriculum); see Randy Diamond, Advancing Public Interest Practitioner Research Skills in Legal Education, 7 N.C. J. & Tech. 67, 90 (2005) (“The shift in emphasis from substantive legal research to factual and other nonlegal research in law practice is difficult for new lawyers who did not expand their research horizons in law school beyond traditional legal research [courses].”). Research goes beyond finding the applicable law. Attorneys are also researching the facts—interviewing the client and witnesses, reading case files, and talking to experts and law enforcement officers. The general skill of research is at the foundation of this preparation as well.


35. MacCrate Report, supra note 11, at 150.

Furthermore, when an attorney submits a document to a court, an attorney is certifying that he or she has conducted research reasonable under the circumstances; that all arguments are supported by the law or that there is “a nonfrivolous argument for extending, modifying, or revising existing law or for establishing new law”; and that all factual statements have been researched or will be researched. Attorneys can be sanctioned under Rule 11 of the Federal Rules of Civil Procedure for improperly researching the facts or law. In addition, there are examples of judges publicly, in court and in their written opinions, pointing out attorneys’ lack of or poor research skills. For example, in an unpublished case out of the United States District Court for the Northern District of Illinois, Judge Plunkett wrote,

Defendants’ submission was either a shot in the dark or it was the result of particularly poor research. Either way, it is simply wrong. In fact, a great deal of authority on this question exists, including several cases from within this circuit. Unfortunately, Plaintiffs’ original memorandum was totally devoid of authority and Defendants’ Response was no better. Not until the Reply did either party bother to do any research on this complex question. We remind the parties of the requirements of Rule 11.

37. The action of “submitting” a document to the court includes “signing, filing, . . . or later advocating.” FED. R. CIV. P. 11(b).

38. Federal Rule of Civil Procedure 11 requires all lawyers making representations to the court to certify that to the best of the person’s knowledge, information, and belief, formed after an inquiry reasonable under the circumstances: . . . (2) the claims, defenses, and other legal contentions are warranted by existing law or by a nonfrivolous argument for extending, modifying, or reversing existing law or for establishing new law; [and] (3) the factual contentions have evidentiary support or, if specifically so identified, will likely have evidentiary support after a reasonable opportunity for further investigation or discovery . . . .

Id. at 11(b)(2)-(3).

39. For a general overview of Rule 11 and sanctionable research mistakes, see Butler, supra note 30, at 681. See also LARRY L. TEPLY, LEGAL RESEARCH AND CITATION 4–5 (5th ed. 1999).

40. See, e.g., Clark v. State Farm Ins. Co., No. 89-0977, 1990 WL 139382, at *3 (E.D. Pa. Sept. 20, 1990) (holding that the plaintiff’s attorney was sanctioned under Rule 11 “for his failure to conduct a normally competent level of legal research”). See generally Mary Whisner, When Judges Scold Lawyers, 96 LAW LIBR. J. 557 (2004) (providing search techniques for finding cases in which judges scold incompetent attorneys). And for a discussion of how the Internet has affected attorneys’ professionalism and ethics, see Lawrence Duncan MacLachlan, Gandy Dancers on the Web: How the Internet Has Raised the Bar on Lawyers’ Professional Responsibility to Research and Know the Law, 13 GEO. J. LEGAL ETHICS 607 (2000).

Judge Plunkett went even further to remind both parties about their research responsibilities:

We decline the parties’ invitation to do their work for them. This court has neither the time nor the inclination to research, develop, and present arguments for litigants. In the present case, neither side has made a satisfactory effort to present this court with the law even though it is readily available after even a modest amount of research. Plaintiffs do cite authority, but it is not from this circuit, and because it was not presented until the Reply, Defendants had no opportunity to respond.  

The judge required the parties to submit new briefs and provided the attorneys with a list of citations to be included in the parties’ briefs—a list that was “by no means exhaustive.”

Being a competent attorney is also part of an attorney’s professional and ethical obligations. An attorney must possess a basic level of competence to locate and evaluate the applicable law. Part of being a competent attorney involves acquiring legal knowledge, which involves preparation and study. This preparation and study occurs daily in attorneys’ careers.

Attorneys also have a duty to the profession of which they are members, which means that attorneys should look beyond the sources and research strategies being used to complete the current research project. Being a competent researcher requires that an attorney maintain his or her competence, through additional training and continuing legal education programs, and

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42. Id.
43. Id. at *2. The judge listed seven cases from the United States Supreme Court and United States Court of Appeals for the Seventh Circuit and three cases from other jurisdictions. Id. The judge also indicated in a footnote that the judges’ “list of citations is in no way intended to relieve the parties of their responsibility to do independent research.” Id. at *2 n.1.
44. Id. at *2.
45. See also Margolis, supra note 5, at 84.
46. This does not mean that an attorney can only represent clients whose cases involve topics that the attorney studied in law school; practicing law involves determining whether the attorney has the skills, knowledge, and ability to handle the complex cases and whether the attorney will do reasonable preparation.
47. MODEL RULES OF PROF’L CONDUCT R. 1.1, cmt. ¶ 6; see also Richard A. Danner, Contemporary and Future Directions in American Legal Research: Responding to the Threat of the Available, 31 INT’L J. LEGAL INFO. 179, 185 (2003) (discussing one difference between legal research and research in other fields in that legal research is done for professional purposes—“to find answers to [clients’] problems”).
49. According to paragraph 6 of the comment at Rule 1.1, competence requires that “[t]o maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law.
requires that the attorney “cultivate knowledge of the law beyond its use for clients, employ that knowledge in reform of the law and work to strengthen legal education.”  Consequently, attorneys must maintain and continue to develop and hone their research skills.

B. Importance of Research Instruction in Law School

The increasing importance of legal research instruction mirrors the growth in the quantity and expanse of legal documents—state, federal, and international—and the resultant technological developments.

Attorneys’ research skills have their foundation in the research instruction provided in law school. Legal research is so integral to problem solving and to the communication of arguments, written and oral, that it is difficult to separate research from other skills, such as writing, and researching the law and its practice, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.” Id. at R. 1.1, cmt. ¶ 6

50. Id. at pmbl. ¶ 6.

51. This involves keeping up-to-date on changes in the law and the profession, “engag[ing] in continuing study and education and comply[ing] with all continuing legal education requirements to which the lawyer is subject.” Id. at R. 1.1, cmt. ¶ 6 (explaining how to maintain competence); see also MacCrate Report, supra note 11, at 208–09.

52. Susan S. Katcher, Reflections on Teaching Legal Research, in EXPERT VIEWS, supra note 6, at 45, 52.

53. MacCrate Report, supra note 11, at 161–62; see Leiter, supra note 4, at 25 (explaining that legal “[r]esearch is not a secondary skill” and that legal research is “as important to learning as it is to practice”); While no one doubts the importance of legal research, “most U.S. law schools have not devoted serious attention to training students to perform this essential lawyering skill.” Barkan, supra note 11, at 404; accord Hemmens, supra note 22, at 236 (concluding that “[t]he sheer number of journal articles and books on the topic of teaching legal research skills is indicative of how embedded legal research is in the legal education landscape”).

54. See CATHY GLASER ET AL., THE LAWYER’S CRAFT: AN INTRODUCTION TO LEGAL ANALYSIS, WRITING, RESEARCH, AND ADVOCACY 242 (2002) (discussing how “research and analysis are intertwined, because while it is true that you cannot analyze an issue unless you know the applicable law, it is also true that you cannot know—or, at least appreciate the significance of—the applicable law until you know the issue”); MacCrate Report, supra note 11, at 161–62; Cordon, supra note 3, at 5 (quoting David R. Barnhizer, The Clinical Method of Legal Instruction: Its Theory and Implementation, 30 J. LEGAL EDUC. 67, 78 (1979), who said “[L]egal research] supports and is integrally linked with many of the other skills and goals of legal education.”); id. at 13–14 (discussing the MacCrate Report and how the legal research skills and knowledge discussed “in the legal research section of the report are germane to . . . other required law school classes”); id. at 15 (stating “[t]he necessity of conducting research pervades a number of other skill areas in the MacCrate Report, not merely the problem-solving component”); Donald J. Dunn, Why Legal Research Skills Declined, or When Two Rights Make
is a complex skill.\textsuperscript{55} An attorney must balance numerous factors when conducting research: thoroughness; accuracy; adequately resolving the issues, including time constraints, not only on a given project, but also on that project in relation to other tasks that need to be completed and the urgency of the completion of the different tasks,\textsuperscript{56} as well as setting aside time to double-

\textit{a Wrong,} 85 LAW LIBR. J. 49, 64 (1993) (“Legal writing and legal research [skills] are not mutually exclusive, nor is one necessarily more important than the other.”); \textit{see also} Cooper, \textit{supra} note 6, at 13 (discussing how an attorney must find the applicable law before he or she can think about the legal problem, or even communicate the information orally or in writing); ROY M. MERSKY & DONALD J. DUNN, \textsc{Fundamentals of Legal Research} 14 (8th ed. 2002) (discussing how the “processes of legal research and legal writing are closely related. Legal research is often futile if the results are not communicated effectively. Legal research informs legal writing, and legal writing is meaningless unless its content is accurate.”); Barkan, \textit{supra} note 11, at 407 (“Although it is problematic and artificial to segregate one aspect of what is in practice an integrated process, legal research still presents an identifiable competency worthy of mastering.”).

Professor Lucia Ann Silecchia, when discussing the importance of both legal research and writing skills, put legal research skills at the foundation of all other skills when she mentioned that “[w]hile, undoubtedly, analytical ability is also of paramount importance, knowing how to locate the correct law to analyze, and being equipped with the skills to convey that analysis effectively to others, are prerequisites for functioning as an effective attorney.” Lucia Ann Silecchia, \textit{Designing and Teaching Advanced Legal Research and Writing Courses,} 33 DUQ. L. REV. 203, 204 (1995); \textit{see also} \textsc{Achieving Excellence,} \textit{supra} note 36, at 346 (developing efficient research strategies will help an attorney “avoid unnecessarily long and costly searches” and discussing how supervising attorneys should “identify any limits or other applicable constraints” for new associates); Barbara Bintliff, \textit{Context and Legal Research,} 99 LAW LIBR. J. 249, 257 (2007) (stating that “[l]egal research underpins almost everything that is done in law”). \textit{See generally} JEFF LENBURG, \textit{The Facts on File Guide to Research at }XXXIX (2005) (discussing how success in writing “depends not only on the quality of [the] writing but also on the quality of [the] research”).


\textsuperscript{56} \textit{See} \textsc{Partnership and Solutions,} \textit{supra} note 7, at 9 (statement of Panelist Susan Nevelow Mart, Faculty Services Librarian and Adjunct Professor of Law, from the University of California Hastings College of Law) (“Legal research means knowing what it is you’re looking for, what the shape of the law is, what your client is looking for, what your assigning attorney is expecting from you, and then asking: What are the tools I need to use?”); Bobbie Studwell, \textit{End-User Electronic Information Competencies,} \textsc{AALL Spectrum,} Oct. 1998, at 4, 5 (listing another skill set to acquire before entering the profession as the skill of evaluation and interpretation, which includes an “[a]wareness of the degree of thoroughness of legal research required based on the end-user’s need for the information and the client’s resources”).

This is very similar to the prioritizing that students must do during their first-year research and writing courses. Some first-semester research and writing courses are only worth two credits. \textsc{Ass’n of Legal Writing Dirs., Legal Writing Inst.,} \textsc{2008 Survey Results} 7 (2008), \textit{available at} \url{http://www.alwd.org/surveys/survey_results/2008_Survey_Results.pdf} (hereinafter \textsc{2008 Survey Results}) (reporting that the average number of credits awarded in 2008 during the first semester of the required research and writing program was 2.36).
check the accuracy of the research; the availability of certain resources; the frequency with which new information is appearing; and limitations due to the client’s resources.\(^{57}\)

In addition, conducting legal research is more of an art, not an exact science.\(^{58}\) There is no formula that a student or attorney can always apply; there is no checklist of steps that must be followed with each and every research project encountered.\(^{59}\) Each research project is determined by the

puts the students in an interesting predicament—research and writing are fundamental skills that attorneys must possess; however, a two-credit hour class is less than the three- or four-credit hour doctrinal or substantive courses that seem to demand the students’ attention.

However, the students are not working in “life or death” situations in their research and writing classes, as the situations may be in the real world. On research and writing assignments, if a student does not find the right law (due to the student’s research), the result is a bad grade, or worse-case scenario, the student fails the class and must retake it. In the real world, if an attorney does not find the right law, this results in a wrong answer for the client, which could have dire consequences for the client and the attorney (in malpractice suits or possible disbarment).

\(^{57}\) See Rosalie M. Sanderson, “Real World” Experience for Research Students, \(7\) PERSP.: \(T\)EACHING \(L\)EGAL \(R\)ES & \(W\)RITING 71, 71–72 (1999) [hereinafter Sanderson, “Real World”] (stating that the major difference between the research conducted in law school and the research conducted in law firms is “the constant pressure of time and money”); Patrick W. Spangler, The New World Versus the Old World of Legal Research, CBA RECORD, Apr. 2006, at 48, 50 (emphasizing that students do not really learn about the costs associated with legal research until their first clerkships).

\(^{58}\) See \(K\)UNZ ET AL., supra note 30, at 27 (stating, “[L]egal research is not a totally linear process.”); \(S\)LOAN, supra note 31, at 9; see also HELENE S. \(S\)HAPO ET AL., \(W\)RITING AND \(A\)NALYSIS IN THE \(L\)AW 279 (5th ed. 2008). In fact, Professors Mersky and Dunn said that legal research is a combination of an art and a science. MERSKY & DUNN, supra note 54, at 14 (mentioning that there are many approaches and “no single, or best way to conduct legal research”). Other professors have mentioned that “[l]egal research is a process”, not a formulaic, step-by-step approach, but similar processes and goals. BARBARA J. BUSHARIS & SUZANNE E. ROWE, \(F\)LORIDA LEGAL RESEARCH 3 (3d ed. 2007); see also CHRISTOPHER G. WREN & JILL ROBINSON WREN, THE \(L\)EGAL RESEARCH \(M\)ANUAL: A \(G\)AME \(P\)LAN FOR \(L\)EGAL RESEARCH AND \(A\)NALYSIS 77 (2d ed. 1986) (recommending that students do not use every research approach with every research problem; “the various approaches are not intended as hard and fast rules about effective research strategies.”).

\(^{59}\) See \(S\)LOAN, supra note 31, at 9 (“Most research projects do not have an established series of steps that must be followed sequentially until the answer to [the] question is uncovered.”); see also Charles J. Ten Brink, A Jurisprudential Approach to Teaching Legal Research, 39 NEW ENGL. L. REV. 307, 308 (2005) (“[S]tudents tend to view legal research as if it were as simple as following a cookbook recipe.”). Always starting research projects with the same source is not a productive use of the researcher’s time. See KUNZ ET AL., supra note 30, at 27. Sometimes an attorney needs to start with secondary sources, especially when the attorney knows nothing about the particular area of law that is being researched. See \(S\)LOAN, supra note 31, at 10. Other times, the attorney can go straight to a primary source because he or she knows that there is a statute on point or he or she has a case citation.
particular context—the client’s situation.\textsuperscript{60}

With each research project, the attorney must develop and implement an appropriately designed, effective, coherent research plan—\textsuperscript{61}from determining the issues and identifying search terms, to developing an alternative plan if the first research plan proves ineffective.\textsuperscript{62} The process of developing a research plan parallels problem-solving skills that students learn in law school: the students diagnose the problem, identify a range of possible solutions or remedies, develop a plan (where to start and what search terms to use), implement the plan, and revisit and reevaluate the plan.\textsuperscript{63}

As noted in the Carnegie Report,\textsuperscript{64} the teaching of professionals, especially attorneys

is a complex educational process, and its value depends in large part upon how well the several aspects of professional training are understood and woven into a whole. That is the challenge for legal education: linking the interests of legal educators with the needs of legal practitioners and with the public the profession is pledged to serve . . . .\textsuperscript{65}

\textsuperscript{60} See \textit{Wren} \& \textit{Wren}, supra note 58, at 29 (including a chapter on gathering and analyzing the client’s facts because “[l]egal research does not occur in a factual vacuum: the purpose of researching the law is to ascertain the legal consequences of a specific set of actual or potential facts”); see also \textit{MacCrake Report}, supra note 11, at 142–48.

\textsuperscript{61} See Studwell, supra note 56, at 5 (providing a list of “Research Competency Skill Sets” attorneys should acquire before entering their profession, including under the “Evaluation and Interpretation Skills” category the “[a]bility to monitor and, when necessary, modify the results of an implemented design or search strategy,” and under the “Manipulation and Organization Skills” category, the “[a]bility to devise and implement a coherent and effective research design”); see also \textit{Achieving Excellence}, supra note 36, at 346 (indicating that “[e]ach search should be part of a well-constructed research strategy . . . .”); \textit{MacCrake Report}, supra note 11, at 157; Seligmann, supra note 34, at 183 (discussing how knowledge of the research process is more important than “knowledge of substantive law and bibliographic information,” to a new attorney).


\textsuperscript{63} See Kurt M. Saunders, \textit{Thinking About Research; Research About Thinking, in Expert Views}, supra note 6, at 85, 88 (“Legal research is by nature a problem-solving process. The research must draw upon an accumulated knowledge base of legal terminology, principles, relationships, and modes of analysis and then use this knowledge to access authority and answers . . . .”).

\textsuperscript{64} “Carnegie Report” is the short name for \textit{Sullivan et al.}, supra note 3.

\textsuperscript{65} \textit{Summary of Educating Lawyers: Preparation for the Profession of Law} 4 (Carnegie Found. for the Advancement of Teaching 2007), available at http://www.carnegiefoundation.org/dynamic/publications/elibrary_pdf_632.pdf. This is known as “civic professionalism.” \textit{Id.} Both the Carnegie Report and \textit{Best Practices} are examining legal
Law school is the beginning of an attorney’s professional career; it is a time during which the foundation of an attorney’s competence and professionalism are established. In law school, students learn the “skills and values” that are necessary to be competent attorneys.\textsuperscript{66}

To guide in the education of attorneys, there are three sets of standards or guidelines that address research instruction in law school—the American Bar Association Standards,\textsuperscript{67} which govern law schools generally; the MacCrate Report,\textsuperscript{68} which also addresses law schools generally; and the Sourcebook on Legal Writing Programs, which addresses the content of legal research and writing classes specifically.\textsuperscript{69}

1. American Bar Association Standards

A law school shall maintain an educational program that prepares its students for admission to the bar, and effective and responsible participation in the legal profession.\textsuperscript{70}

The American Bar Association is the accreditation organization for law schools and publishes the Standards for Approval of Law Schools. The standards “are minimum requirements designed, developed, and implemented for the purpose of advancing the basic goal of providing a sound program of education and discussing the best ways to reform legal education. Research skills are being taught in law schools and on the job; research across the career could be considered a slight curriculum reform.\textsuperscript{66}

66. Ian Gallacher, “Who Are Those Guys”: The Results of a Survey Studying the Information Literacy of Incoming Law Students, 44 CAL. W. L. REV. 151, 160–61 (2008) [hereinafter Gallacher, Who Are Those Guys?] (surveying students on what lawyering skills they thought were important and how easy it was to acquire those skills). In the survey that Professor Gallacher discussed, 6.9% of the students indicated that legal research was the most important skill, whereas 31.5% indicated that legal analysis was the most important skill, followed by written communication (25.1%) and oral communication (23.4%). \textit{Id.} at 161. More students (21.2%) indicated that legal research was the easiest to learn in law school (second was written communication, 19.9%). \textit{Id.} Only 10.9% of the students indicated that legal research was the most difficult skill to learn (oral communication with 27% was the “most difficult” skill to learn). \textit{Id.}


68. MACCRATE REPORT, supra note 11.


70. ABA STANDARDS FOR APPROVAL, supra note 67, at Standard 301(a). “A law school shall maintain an educational program that prepares its students to address current and anticipated legal problems.” \textit{Id.} at Interpretation 301-1.
legal education." A sound program of legal education is founded on a curriculum in which students learn a number of skills, of which legal research is at the very foundation.

Standard 302 states that students must receive substantial instruction in legal research. The accompanying interpretations to Standard 302 discuss substantive instruction and the factors to evaluate the rigor required for instruction of the skills listed in Standard 302(a)—the skills needed for an attorney to be an "effective and responsible participant in the legal profession." Legal research is specifically listed as one of the skills that "law schools shall require that each student receive substantial instruction . . . ." While no specifics are provided in the ABA Standards for what will satisfy the "requirement of substantial instruction" in research, however, Interpretation 302-3 states that students should be required "to take one or more courses having substantial professional skills components. To be 'substantial,' instruction in professional skills must engage each student in skills performances that are assessed by the instructor." To ensure that students are acquiring the professional skills, such as legal research, the students’ skills performances must be assessed by the professors. Consequently, law schools need to actively evaluate the students’ research instruction to ensure the students develop research skills for "effective and responsible participation in the legal profession."

And at this point, there is no required assessment of the students’ research skills between the first-year legal research and writing courses and the students’ performance in the real world as an attorney. The National Conference of Bar Examiners is heading towards including legal research as a component on the multi-state bar examination. When this happens, law

71. Id. at pmbl.
72. Id. at Standard 302.
73. Standard 302(a) includes skills such as legal analysis and reasoning, legal research, problem solving, and oral and written communication.
74. Id. at Standard 302(a)(1).
75. Id. at Standard 302(a)(2) (emphasis added).
76. Id. at Interpretation 302-3. But the question is what is "substantial"? It is arguable that "substantial" means more than just first-year legal research and writing courses because first-year legal research and writing courses cannot cover all research topics. See infra notes 230–38 and accompanying text (stressing all the different skills that students learn in first-year research and writing classes).
77. ABA STANDARDS FOR APPROVAL, supra note 67, at Interpretation 302-3.
78. Id. at Standard 302(a)(1).
79. Summer clerkships, law review, moot court, and advanced legal research classes are optional ways for students to refine their skills after the first year. See Dunn, supra note 54, at 62 (stating that legal research cannot be taught solely in the first-year curriculum).
80. Roy M. Mersky, Legal Research Versus Legal Writing Within the Law School
school administrators and faculty members will need to more fully emphasize legal research instruction to ensure that students are competent researchers before they graduate from law school and take the bar exam. Research skills are necessary for attorneys to be competent; therefore, research is a fundamental competency that should be tested on the multistate bar exam, along with the other competency skills that are tested.

Curriculum, 99 LAW LIBR. J. 395, 395 (2007) (stating that “[i]n spring 2006, the National Conference of Bar Examiners announced plans to explore the development of a stand-alone component of the bar exam that will focus on legal research methods and skills”) (citing Erica Moeser, President’s Page, B. EXAMINER, May 2006, at 4, 5); see Hardy, supra note 22, at 221 (discussing how including legal research on the bar exam will apply pressure on law schools for better research instruction); see also Claire M. Germain, Legal Information Management in a Global and Digital Age: Revolution and Tradition, 35 INT’L J. LEGAL INFO. 134, 134 (2007) (discussing how the United States may be adding a research component to the bar exam and how doing that “signifies the importance of sound legal research training to the competent practice of law”); Hardy, supra note 22, at 225 (indicating that “[i]f research skills are necessary to the proper practice of law but cannot be added to existing bar exams, then something is wrong with existing bar exams, and it is time to overhaul them. . . . More to the point, research is a skill that often requires highly abstract thinking about how to solve problems; in this respect, research differs not one whit from the ‘best’ questions on bar exams.”). See generally Barkan, supra note 11.

Actually, Erica Moeser mentioned “exploratory work on developing a test of legal research skills” back in May 2002. Erica Moeser, President’s Page, B. EXAMINER, May 2002, at 4, 5. Denise Riebe, professor and co-author of the book Pass the Bar!, indicated that “[m]ost critics of the choice of skills tested on bar exams assert that bar exams fail to test the skills identified by the MacCrate Report as basic lawyering skills.” Denise Riebe, A Bar Review for Law Schools: Getting Students on Board to Pass Their Bar Exams, 45 BRANDeS L.J. 269, 279 n.73 (2006–2007) (identifying legal research as just one of the skills not tested); see also Statement on Bar Exam, supra note 8, at 447; Lorenzo A. Trujillo, The Relationship Between Law School and the Bar Exam: A Look at Assessment and Student Success, 78 U. COLO. L. REV. 69, 77–81 (2007); infra notes 84–102 and accompanying text (discussing the MacCrate Report).

81. Barkan, supra note 11, at 405 (explaining that adding a legal research component to the bar exam would be an “incentive[ ] for improving legal research instruction in law schools”); see also Mersky, supra note 80, at 401 (“The fact that the [National] Conference of Bar Examiners has recognized the importance of legal research skills and the necessity of ensuring that law graduates are equipped with those skills bodes well for educators who have long struggled to squeeze legal research into already crowded curricula.”).

82. Hardy, supra note 22, at 225. “Research does not vary across state lines as much as law does.” Id. at 224–25; see also Curcio, supra note 11, at 371 (discussing how current bar exams fail to test basic lawyering skills such as legal research and reading and comprehending sources of law).

83. Curcio, supra note 11, at 366 (discussing how the current license “requirements screen for only a narrow range of skills that competent lawyers should possess”).
2. MacCrate Report

The MacCrate Report is also “concerned with what it takes to practice law competently and professionally.” The MacCrate Report states that “[l]aw schools should continue to emphasize the teaching of the skill[ ] of . . . ‘legal research,’ . . . .” In fact, the skill of legal research is so important that the skill was listed in the MacCrate Report as one of the ten “fundamental lawyering skills.” As one looks at the list of the other fundamental lawyering skills—(1) problem solving; (2) legal analysis and reasoning; (3) factual investigation; (4) communication; (5) counseling; (6) negotiation; (7) litigation and alternative dispute resolution procedures; (8) organization and management of legal work; and (9) recognizing and resolving ethical dilemmas—the skill of legal research is that skill that supports all the other fundamental skills listed, and it is the foundation of problem solving—attorneys’ fundamental job responsibility. Problem solving cannot be done without conducting research; legal reasoning and analysis cannot be accomplished without research; factual investigation requires research; and so forth.

84. MACCRAKE REPORT, supra note 11. The MacCrate Report was the precursor to Best Practices and focused on the gap between what was being taught at law school and what skills practicing attorneys needed. Id. at 3. Established by the American Bar Association’s Section of Legal Education and Admission to the Bar in 1989, the mission of the task force (that authored the MacCrate Report) was to study the gap between legal education and the legal profession. Id. at xi, 3. However, the task force saw the “relationship between legal education and the practicing bar differently”—“both communities are part of one profession.” Id. at 3.
85. Id. at 125.
86. Id. at 331–32.
87. Id. at 138–40 (listing legal research as the third fundamental lawyering skill).
88. Id.
89. See SOURCEBOOK, supra note 69, at 15 (discussing how research and analysis skills are “intertwined”).
90. The only listed skill that does not require legal research is number nine, recognizing and resolving ethical dilemmas. But much like legal research, the ethics and professional responsibility that embody this skill set permeate all other fundamental lawyering skills.
91. “No higher cognitive task, such as analysis or synthesis of the subject matter, can take place without the acquisition of knowledge . . . .” Katcher, supra note 52, at 46 (emphasis added).

Professor Steven M. Barkan, in his article discussing whether a legal research component should be included on the bar exam, noted,

The difficulties in isolating legal research from the entire process of analysis, research, and writing through which lawyers solve problems must also be noted. Without the ability to analyze problems and determine what information is needed, or to effectively formulate and communicate results, research skills are of minimal value. Without accurate substantive information about the law,
The skill of legal research is also the foundation for the four values identified in the MacCrate Report as the “Fundamental Values of the Profession”: (1) provision of competent representation; (2) striving to promote justice, fairness, and morality; (3) striving to improve the profession; and (4) professional self-development. The relationship between research and the first value, competent representation, has already been discussed. The second value—justice, fairness, and morality—are based on an understanding of substantive law and policy, which requires research; this is not knowledge that can be gained solely by reading a few cases in casebooks. Improving the profession, the third value, involves improving the entire profession from top to bottom—legal education to attorney licensing, continuing legal education programs to the practice of law. In order to make improvements, attorneys must have an understanding of the profession as a whole, which requires research. And finally, the fourth value, professional self-development, which includes such values as “[e]mploying a consistent practice of reading about new developments in the law” and “[t]aking advantage of courses of study for increasing one’s knowledge of one’s own field of practice, [and] other fields of legal practice” also requires research.

The MacCrate Report also included a list of sample goals for each of the fundamental lawyering skills. The following three goals were identified for legal research: (1) Students must learn real world, problem solving skills, which include the skill of efficiently and effectively conducting research, in print or online. Students must be exposed to the research tools available for their first-year doctrinal subjects, but also in specialized areas such as administrative law, international law, environmental law, and tax law. After learning about the different sources, students must (2) “learn the legal research process,” which includes all the problem-solving strategies from identifying issues, researching and analyzing the issues, and communicating analysis and problem solving are ineffective. What might initially be perceived as poor writing often is actually a manifestation of inadequate research.

Barkan, supra note 11, at 407.
92. MacCrate Report, supra note 11, at 140–41 (listing the fundamental values).
93. See supra notes 27–51 and accompanying text.
94. See MacCrate Report, supra note 11, at 213; see also Gabrielli, supra note 22, at 2 (discussing how research is more than just finding the applicable rule of law or the relevant cases; researchers should not “lose sight of the policy reasons behind the result reached in the earlier decision”).
96. MacCrate Report, supra note 11, at 219.
97. Id. at 138–41.
98. Id. at 255–56.
99. Id.
the results orally or in writing. And finally, students must (3) learn the differences between primary and secondary sources and when to conduct research in those sources. Students must learn how to conduct research in a variety of sources and learn strategies to effectively find the best, most current authority and provide proper attribution.

Students need to be taught good research habits, starting with their legal research and writing classes.

3. Sourcebook on Legal Writing Programs

While the ABA Standards and the MacCrate Report focus on legal education in general, the Sourcebook on Legal Writing Programs supplies guidelines for successful legal research and writing programs by providing common features and parameters. The importance of legal research instruction can be seen in the seven outcomes that effective legal research and writing programs achieve. Legal research impacts four of those seven outcomes: understanding the legal system of the United States; analyzing facts, issues, and legal authorities; solving problems; and of course, conducting efficient legal research.

According to the Sourcebook, in an effective legal research and writing program, students should learn the following in their research instruction: (a)
the importance of legal research;\textsuperscript{106} (b) an introduction to legal sources—primary, secondary, and finding aids—in both print and electronic formats;\textsuperscript{107} (c) research strategies, developing a research plan, and being flexible with the research plan developed;\textsuperscript{108} (d) an ability to recognize and address professional responsibility issues that arise in legal research;\textsuperscript{109} (e) the ability to transfer knowledge and skills to solve new and different legal problems;\textsuperscript{110} (f) an appreciation of “the role of intuition and imagination throughout the research process”;\textsuperscript{111} and (g) an ability to “determine when research has been exhaustive, given the time and monetary limitations of law practice.”\textsuperscript{112}

In addition to the research instruction, there are many other skills that are taught in first-year legal research and writing classes including, but not limited to, writing, the format and structure of different documents, attribution, oral communication (office conference and oral advocacy), legal reasoning and analysis, issue spotting, problem solving, time management, and professionalism and ethics.\textsuperscript{113} It is in the first-year legal research and writing classes that the foundation of the road of research instruction is laid, in addition to many of the other fundamental lawyering skills.

\section*{III. The Roadblocks on the Road of Research Instruction}

Learning how to research is a challenging skill for law students to learn. When most students enter law school they have no conceptual understanding of the law, which causes them to have “no conceptual tools with which to work,” and they have no contextual basis in order to learn research skills.\textsuperscript{114}

\textsuperscript{106} Id. at 26.
\textsuperscript{107} Id. at 26, 27.
\textsuperscript{108} Id. at 26.
\textsuperscript{109} Id. at 35–43; see id. at 10.
\textsuperscript{110} Id. at 11, 44. Students should learn the transferability of research skills and strategies. See Timothy P. Terrell, \textit{What Does and Does Not Happen in Law School to Prepare Students to Practice Law: A View from Both Sides of the Academic/Practice Dichotomy}, 83 \textit{LAW LIBR. J.} 493, 496 (1991) (“The best human capital is knowledge or skills that are not confined to a particular, limited circumstance but can be transferred among a range of circumstances and transformed as necessary.”).
\textsuperscript{111} \textit{SOURCEBOOK}, supra note 69, at 26.
\textsuperscript{112} Id.
\textsuperscript{113} See id. at ch. 2 (discussing the content of the first-year legal research and writing courses, which includes reasoning and analysis instruction, writing instruction, legal research instruction, and oral advocacy instruction; instruction in interviewing, counseling, and negotiating; professionalism and ethics; and instruction on being self-reliant).
\textsuperscript{114} James G. Miles, \textit{Out of the Jungle}, AALL \textit{SPECTRUM}, Feb. 2005, at 10, 16; see Saunders, supra note 63, at 88 (discussing how students “have not yet developed the schemata
Because students have little or no prior experience conducting research, they “cannot directly draw on their prior learning experiences as they transition into law school.” When attorneys begin to research, they must not only have an understanding of the different sources available, but they must know where the different sources are found (print or electronic, even microfiche/microfilm), what type of information the different sources contain, and how to access information in the particular sources. Even with an understanding of the different sources, the type of information that they contain, and how to find information in the sources, the students must also know how to develop a research plan or strategy and how to adapt when the initial plan and strategies are not successful. There are roadblocks that inhibit our law students in acquiring research skills and our law schools in providing research instruction.

A. Research Roadblocks for Our Law Students

Students do not know what they do not know. To figure out how to teach legal research, it is necessary to understand some of the roadblocks that our students face in learning how to do legal research. It is also necessary to develop ways to help students maneuver around the roadblocks and to continue developing their research skills throughout law school and their legal careers. Three roadblocks are (1) law students are research novices, which is caused by a number of factors—the lack of prior research instruction, especially in regards to online research; the expanding universe of research sources; past interactions with librarians; legal vocabulary, and students’ over-confidence in their skills; (2) law students only to research effectively and efficiently”); Ian Gallacher, Forty-Two: The Hitchhiker’s Guide to Teaching Legal Research to the Google Generation, 39 AKRON L. REV. 151, 152 (2006) [hereinafter Gallacher, Hitchhiker’s Guide] (“First-year law students frequently lack the contextual understanding necessary to discover and evaluate all the extant decisions necessary to develop a full analysis of the issues presented to them.”).

115. Spanbauer, Handout, supra note 17, at 1; see SOURCEBOOK, supra note 69, at 26; Kristin B. Gerdy, Making the Connection: Learning Style Theory and the Legal Research Curriculum, in TEACHING LEGAL RESEARCH AND PROVIDING ACCESS TO ELECTRONIC RESOURCES 71, 74 (Gary L. Hill et al. eds., 2001) (discussing how “adults learn best experientially”).

116. See MACCRATE REPORT, supra note 11, at 159–60; Ryan, supra note 62, at 31 (discussing how well-designed research exercises help “students examine materials in detail, focus on the interrelationship of sources, compare and contrast similar materials, and think about when and how they might use the materials in the future”).

117. MACCRATE REPORT, supra note 11, at 162; see ACHIEVING EXCELLENCE, supra note 36, at 350–51 (discussing electronic research specifically).

118. Dunn, supra note 54, at 57–58.
see the trees and do not understand the forest, and they do not put legal research into a context by learning to develop research plans or strategies and by learning to transfer skills from one research project to another; and (3) legal research is not glamorous or easy; there are no shortcuts, and research requires, at the minimum, patience.

1. Law Students Are Novices When It Comes to Research Skills

a) Lack of Prior Research Instruction Factors into the Roadblock

“[P]eople learn by applying what they already know to create new understandings.” 119 New material must be connected to previous research instruction, 120 and without a research framework to work with, the students need to learn from scratch. 121 What research skills are taught prior to law school? In elementary school, students were once taught how to use the card catalog in the library; 122 students learned how to search by title, author, or subject. At one time in undergraduate institutes, 123 students had an opportunity to take courses that focused on how to use the resources available at the university library. Now, with the dramatically changing appearance of libraries, 124 students get a different introduction to research because research

119. Keefe, supra note 2, at 118, 119 (discussing one reason law graduates’ research skills are deficient “is that they entered law school with poor or nonexistent research skills”).

120. See Gerdy, supra note 115, at 74–75.

121. See Katcher, supra note 52, at 47 (stating that in the first year of law school, “the novice law student does not have sufficient research skills or experience to comprehend fully the role of research strategies”).

122. See Keefe, supra note 2, at 118 (describing how adults who are thirty years old or older learned how to use a card catalog).

123. Informally at the beginning of one semester, I distributed a questionnaire and one of the questions asked the students whether they received formal research instruction or took a research course in college. Forty-five percent of the students admitted to never having taken any course in college in which he or she learned research, and for some of the remaining fifty-five percent, the students only had an introduction to research in freshman English classes.

124. See BERRING & EDINGER, supra note 6, at 6 (discussing how the law “is morphing before our eyes”); Virginia J. Wise, Managing Information Inflation, in EXPERT VIEWS, supra note 6, at 119, 120 (describing the exponential growth of the universe of research materials and how it is due to the growth in quantity of materials, the “enormous proliferation of formats” available, and the rate of change); Keefe, supra note 2, at 118 (discussing how “the proliferation of the Internet and online databases” has changed how legal research is taught); id. at 121–22 (describing how law students today are researching “in the midst of an information explosion”); Robert C. Vreeland & Bert J. Dempsey, Toward a Truly Seamless Web: Bringing Order to Law on the Internet, 88 LAW LIBR. J. 469, 469 (1996) (stating that researchers cannot keep up with the flood of materials being made available electronically); see also THOMAS MANN, THE OXFORD GUIDE TO LIBRARY RESEARCH xiii (1998) (stating that “[r]eal libraries and virtual libraries are not the same”).
is done primarily electronically.\footnote{Danner, supra note 47, at 191 (explaining that students rely on the Internet for research).}

The contributors to the Sourcebook suggest that law students’ research education prior to law school is limited, or non-existent.\footnote{Sourcebook, supra note 69, at 26 (stating that “[m]any students will enter law school without previous rigorous research experience”); see also Herbert E. Cihak, Teaching Legal Research: A Proactive Approach, in Teaching Legal Research and Providing Access to Electronic Resources 27, 28 (Haworth Info. Press, Inc. 2001) (stating that “the research skills of law students are on a downward spiral”); Anne S. McFarland, Legal Research on the Info-Frontier, in Expert Views, supra note 6, at 73, 74 (recognizing that incoming law students are unsophisticated when it comes to libraries—organization, contents, and how to use the materials); Gallacher, Who Are Those Guys?, supra note 66, at 190 (citing to a 2004 AALL survey that concluded, “[T]eaching legal research with an underlying assumption that entering first year students have basic research skills may be flawed.” (quoting KATHRYN HENSIAK ET AL., ASSESSING INFORMATION LITERACY AMONG FIRST YEAR LAW STUDENTS: FINAL TECHNICAL REPORT 3 (2004))).}

If this is the case, students are information illiterate when they arrive at law school.\footnote{Lee F. Peoples, The Death of the Digest and the Pitfalls of Electronic Research: What Is the Modern Legal Researcher to Do?, 97 LAW LIBR. J. 661, 678 (2005).  Actually, Professor Peoples goes on to say, “We can no longer assume that students begin their legal education with a basic foundation of how to conduct research.” Id. at 679.}

There is a “disconnect between what students come in knowing and what we hurl at them in the first semester.”\footnote{Professor Keefe discussed that “[t]o be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information.” Keefe, supra note 2, at 121 (quoting AM. LIBRARY ASS’N, PRESIDENTIAL COMMITTEE ON INFORMATION LITERACY: FINAL REPORT 1 (1989)); see also Danner, supra note 47, at 194. The concept of “information literacy,” as defined by the American Library Association, means:}

To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information. . . . Ultimately, information literate people are those who have learned how to learn. They know how to learn because they know how knowledge is organized, how to find information, and how to use information in such a way that others can learn from them. They are people prepared for lifelong learning, because they can always find the information needed for any task or decision at hand.

\textit{Id.} (quoting AM. LIBRARY ASS’N, supra note 127, at 1); Gallacher, Who Are Those Guys?, supra note 66, at 192 (discussing how information illiteracy will affect students throughout their legal careers and how students “are unaware that such deficits exist”).

Professor Keefe states that “[t]his disconnect causes frustration, anxiety, and alienation” for law students.\footnote{Keefe, supra note 2, at 130 (emphasis added); Peoples, supra note 127, at 678.}
The incoming law students are starting their research where they are comfortable—online—and they do not visit physical libraries.\textsuperscript{130} When starting their research online, students are not thinking about the importance of source evaluation or selection.\textsuperscript{132} Students know how to use the Internet providing them perspective on the relevance of that detail.

\textsuperscript{130} See Keefe, supra note 2, at 118 (recognizing that our law students “are much more likely to gravitate toward the Internet and online databases” and discussing a survey that reported that “today’s college freshman are less aware of a ‘pre-Internet’ world” and how “[b]y the time [today’s college freshman] were sixteen to eighteen years old, all of them were using computers”); \textit{id.} at 121 (discussing the PEW Research Center 2002 study in which “75% of college students said they use the Internet more than the library, while less than 10% said they use the library more than the Internet for information searching”); see also Joanne Dugan, \textit{Choosing the Right Tool for Internet Searching: Search Engines vs. Directories}, 14 \textit{TEACHING LEGAL RES. & WRITING} 111, 111 (2006) (stating that students are “technologically savvy and sophisticated consumers of Web-based information,” though that does not mean that our students’ research skills are better); Dunn, \textit{supra} note 54, at 59 (discussing how our law students are “not intimidated by the new technologies” and “underst[an]d computers and databases and their capabilities and potentials”); Gallacher, \textit{Hitchhiker’s Guide}, \textit{supra} note 114, at 163–64, 166 (incoming law students “cannot remember a time when computers were not an integral part of their academic lives”); Sanford N. Greenburg, \textit{Legal Research Training: Preparing Students for a Rapidly Changing Research Environment}, 13 \textit{LEGAL WRITING: J. LEGAL WRITING INST.} 241, 266 (2007) (“Many of our students come to law school with considerable experience doing free research on the Internet.”); Milles, \textit{supra} note 114, at 11 (explaining one position that our law students are more intimately familiar with digital information because they grew up in front of video games); Peoples, \textit{supra} note 127, at 661 (discussing how the Generation X and the millennial generation “students have their own preferences when it comes to electronic research”); Potter, \textit{supra} note 36, at 288 (stating that “[m]ost of our students . . . have grown up with . . . technology and are comfortable with the changes and innovations wrought by computers. Searching databases for information is a part of their world.”); Spencer L. Simons, \textit{Navigating Through the Fog: Teaching Legal Research and Writing Students to Master Indeterminacy Through Structure and Process}, 56 \textit{J. LEGAL EDUC.} 356, 357 (2006) (citing articles by Theodore Potter and James Milles for the premise that “our students now are thoroughly creatures of the computer and electronic communications age”); Carrie W. Teitcher, \textit{Rebooting the Approach to Teaching Research}, 99 \textit{LAW LIBR. J.} 555, 556 (2007) (stating that “students are computer literate and frequently familiar with LexisNexis before they get to law school”).

\textsuperscript{131} See Gallacher, \textit{Who Are Those Guys?}, \textit{supra} note 66, at 178 (indicating that students would rather research on the Internet than in the library). Students in Professor Gallacher’s survey did sense “that the physical library retains some role in performing legal research but that they believe[d] the internet is a more important source of legal information.” \textit{Id.} at 179; see also Ryan, \textit{supra} note 62, at 31 (explaining our students’ lack of motivation to do research exercises; one excuse is lack of familiarity with a law library and lack of familiarity with how the library is organized).

\textsuperscript{132} See \textit{PARTNERSHIP AND SOLUTIONS}, \textit{supra} note 7, at 9; Danner, \textit{supra} note 47, at 191; see also Danner, \textit{supra} note 47, at 182 (quoting Karl N. Lewellyn, \textit{Legal Tradition and Social Science Method—A Realist’s Critique}, in \textit{ESSAYS ON RESEARCH IN THE SOCIAL SCIENCES} 89,
search engines and to *find* information,\(^\text{133}\) but they come to law school without formal training in *effective* online research strategies.\(^\text{134}\) Students need instruction in how to critically evaluate the results they found.\(^\text{135}\) Without this instruction, the students do not have the creativity or context in which to approach legal problems generally, which in the real world would have serious consequences for not only the attorney, but also the client.\(^\text{136}\)

95–96 (Brookings Inst. 1931)) ("[T]he almost inevitable tendency in any thinking, or in any study, first to turn to the most available material and to study that—to study it exclusively—at the outset; second, having once begun the study of the available, to lose all perspective and come shortly to mistake the merely available, the easily seen, for all there is to see.").

\(^{133}\) See Dugan, *supra* note 130, at 111 (discussing how students need to learn the differences between information and research ("the former is perfectly acceptable for much of their everyday lives, the rigors of . . . legal advocacy require the latter"), and the differences between "good enough" and "best quality"); Keefe, *supra* note 2, at 122 (differentiating between "finding" information and "searching" for information).

\(^{134}\) See *PARTNERSHIP AND SOLUTIONS*, *supra* note 7, at 9; Mersky, *supra* note 80, at 399 (stating that "students are quite able to retrieve all sorts of information with very little effort—and, in their minds, very efficient at it"). Conducting research on the Internet is more than just Googling key words or phrases. See Kathleen M. Carrick, *A Case Study Approach to Legal Research: The Kent State Case*, 73 LAW LIBR. J. 66, 71 (1980). The number of results a researcher obtains is not an indication of how effective the search was. See Dugan, *supra* note 130, at 111 (discussing how researchers’ use of the available tools becomes less sophisticated due to how sophisticated the search tools are); *see also RESEARCH SKILLS*, *supra* note 3, at 5 (containing a discussion by Dean Kaufman on how our students have become "researchers who from grade school through law school use a quantity v. quality approach to research, without determining context, verifying the sources or even understanding the basis of the issue they are researching"); Keefe, *supra* note 2, at 122 (discussing how online research tools are less effective because “they encourage researchers to proceed without thinking").

\(^{135}\) See Keefe, *supra* note 2, at 122 (“The Internet has made it so easy to *find* information that students often do not know how to *search* for it.” (emphasis in original)). The students are not learning the difference between finding information and conducting legal research. Obtaining an instant list of research results is not research. Finding a list of cases somewhat on point is not the same as understanding, synthesizing, and analyzing the correct information. Students are marvelous at finding cases *somewhat* on point, but students lack skills in synthesizing information and not accessing secondary sources such as treatises. Students must not only access information, but think about the information that they have found. See Tracy L. McGaugh, Presentation, Responding to Academic Misconduct of Millennial Students (Thirteenth Biennial Conference of the Legal Writing Institute, Indianapolis, Ind., July 15, 2008) (notes on file with author) (talking about how millennials focus more on the outcomes than the processes).

\(^{136}\) See KUNZ ET AL., *supra* note 30, at 5; Carrick, *supra* note 134, at 71. Students do not think about how the results (or lack thereof) of their research efforts directly affect the client. *See* Golden, *supra* note 7, at 41.
b) The Fact That Law Students Grew up with the Internet Contributes to the Novice Research Skills

Since our law students grew up on the Internet, they overlook valuable resources because they do not understand what content is available in what type of sources and do not take the time to understand basic research strategies such as, using indices, consulting table of contents, and starting with general terms and working to more specific terms. The universe in which our students are learning how to research, and in which attorneys are working, is no longer finite, and little, if any, hierarchy or organization exists to offer structure to the students when they are researching online.

The fact that the legal research environment is no longer finite has its benefits and detriments. One benefit is that researching online enables legal researchers to accomplish mechanical tasks, such as Shepardizing, quickly and efficiently. Another benefit is that more and more legal sources are being

137. See supra notes 130, 132–34 and accompanying text; see also Dugan, supra note 130, at 111 n.1 (quoting Patricia Senn Breivik, “Today’s undergraduates are generally far less prepared to do research than were students of earlier generations, despite their familiarity with powerful new information-gathering tools.” Patricia Senn Breivik, 21st Century Learning and Information Literacy, CHANGE, Mar./Apr. 2005, at 22).

138. See Dugan, supra note 130, at 111; Pettinato, supra note 55, at 29 (“The availability of . . . technology can cause problems because law students who become too dependent on technology for their research often do so at the expense of developing traditional paper-based searching capabilities.”).

139. See BERRING & EDINGER, supra note 6, at 6 (“The new world of legal research floats in an ocean of electronic information.”); Cooper, supra note 6, at 14 (discussing how there has been an “explosion of law” in the 1960s, 1970s, and 1980s); Dugan, supra note 130, at 111 (discussing how the amount of information available on the Internet has increased since ten years ago); see also ACHIEVING EXCELLENCE, supra note 36, at 346.

140. See Bintliff, supra note 54, at 259 (discussing how the infinite universe of electronic legal resources “is not organized in any meaningful way” and how print resources provided an immediate context for the reader when he or she was conducting research); see also Keefe, supra note 2, at 124 (discussing how computers and the Internet have changed research strategies and “most incoming law students simply do not think about research systematically, much less hierarchically”). See generally Vreeland & Dempsey, supra note 124 (advocating for better legal searching utilities for the Internet).

141. Sometimes print sources are the best place to start; other times, electronic sources are the best place to start. E.g., SLOAN, supra note 31, at 13. Determining where to start researching depends on a number of factors, including “the resources available in [the] library, the amount of time [the student has] for [the] project, the depth of research [the student] need[s] to do, and [in the real world], the amount of money [the] client can spend.” Id.

142. See, e.g., BERRING & EDINGER, supra note 6, at 69–70. However, “the computer can’t make you smarter, just faster.” WREN & WREN, supra note 58, at 135; see also LENBURG, supra note 54, at xxxi (discussing how much easier research is now due to electronic technology, “so long as [the researcher] understand[s] the process, and know[s] where to find and how to access
made available online;\textsuperscript{143} therefore, researchers can access the information quickly.\textsuperscript{144} A detriment to conducting research online is that the researcher loses sight of the larger context; online information is organized in a manner that is not visible to the researcher.\textsuperscript{145} Therefore, the researcher is conducting keyword searches without a context.\textsuperscript{146} Other detriments include the availability of legal resources on the Internet that causes disincentives for students to learn print research, which in certain situations, is the better place to start conducting such sources”).

\textsuperscript{143}. See Molly Warner Lien, Technocentrism and the Soul of the Common Law Lawyer, 48 Am. U. L. Rev. 85, 93 (1998–1999) [hereinafter Lien, Technocentrism] (mentioning how lawyers have “access to amounts of legal information previously undreamed of, much of which was available only to those practicing near major university or government libraries”); Milles, supra note 114, at 11 (opining that “[l]ibraries in the future are going to be mostly online,” with the only exceptions being monographs and law journals); see also Potter, supra note 36, at 293 (discussing how “fewer of the more sophisticated analytical tools are available online,” such as loose-leaves, monographs, and treatises).

\textsuperscript{144}. See Bintliff, supra note 54, at 250. But see Teitcher, supra note 130, at 555 (stating that legal writing professors “face the daunting task of convincing students trained in computers and accustomed to the instant gratification offered by the Internet that books have an important role to play”); contra Achieving Excellence, supra note 36, at 140 (pointing out the advantages of electronic research—“flexibility, specificity, currency, and speed”).

\textsuperscript{145}. See Lien, Technocentrism, supra note 143, at 101; Joan Shear, Elevating Form Above Substance—A Reply to Jim Milles and His Assumptions About Approaches to Teaching Legal Research, AALL Spectrum, June 2005, at 10, 11 (stating that “the structure of the data in many of our research tools is much more readily apparent when one uses the print version, rather than the online version”); Whisner, supra note 8, at 392; see also Shear, supra note 145, at 10 (discussing how students’ “[f]amiliarity with hyperlinks doesn’t mean [they] know how to organize information or get to where [they] need to go without running around in circles”).

\textsuperscript{146}. See Shear, supra note 145, at 11 (discussing how legal research “concepts can be taught better with strong examples, which are often easier to see in print examples rather than the electronic searching”).

\textsuperscript{147}. See Dugan, supra note 130, at 113 (“We know that many of the best gems of information are still only available in print.”). At this time, not all legal sources are available online. See Mark Gediman, Bits vs. Bytes in the 21st Century, L. Librarians in the New Millennium (publication from West Librarian Relations), Jan.–Feb. 2006, at 5 (“Finally, everything is not available online.” (emphasis in original)); see also Greenburg, supra note 130, at 259 (“The superficial ease with which online primary source databases can be searched tempts students and novice attorneys to under-utilize valuable skills [such as developing a research strategy and determining where to start] that may seem to delay looking for on-point primary sources.”); Milles, supra note 114, at 11 (stating libraries will be “mostly digital”); Teitcher, supra note 130, at 555. For example, in his article, Theodore Potter explained how one first-year legal research student said, “I can’t make [a legal encyclopedia] work to complete my assignment; I’m a computer person.” Potter, supra note 36, at 287. Our law students “refuse to believe that [information] isn’t all out there electronically.” Shear, supra note 145, at 11.

However, Professor Gallacher’s survey found that 71.5% of the students “agreed that ‘[t]he
research, and students do not learn how law school libraries are organized (not even the online databases on the law school library web site). In addition, due to the students’ inexperience in handling the abundance of materials available online, the students have a tendency to become overwhelmed by the amount of information and they develop bad research habits, such as selecting the “most popular” results instead of the best results.

internet is a valuable tool for legal research but it cannot be used to the exclusion of library research.” Gallacher, Who Are Those Guys?, supra note 66, at 179. Similarly, Professor Greenburg’s survey found that “many of our respondent [attorneys] indicated that the ability to use print resources is still an important skill that law schools should teach new attorneys.” Greenburg, supra note 130, at 251.

148. E.g., Sourcebook, supra note 69, at 9 (noting that research in print resources can provide “students valuable insights concerning the structure of the law, as well as the opportunity for browsing and serendipitous discoveries”); Andrew J. McClurg, 1L of a Ride: A Well-Traveled Professor’s Roadmap to Success in the First Year of Law School 276 (2009) (telling students that “[i]t’s important to first learn how to do legal research with real books, just like it’s important that elementary school students learn how to do basic math before giving them calculators. Knowing how to do book research makes students better computer researchers because they better understand the sources with which they’re working . . . .”); James A. Gardner, “Dear Jim”: Spectrum Readers Weigh in on the Print v. Digital Debate With Their E-mails to Jim Milles, AALL Spectrum, June 2005, at 12, 12 (disagreeing with Jim Milles’s idea that research instruction should begin immediately with electronic sources because “[b]asic legal research is more difficult and less efficient electronically,” especially when looking at a statute). However,

there can be a cost to the client for the inefficiency of researching solely in printed materials, because the inefficiency drives up the billable hours charged to the client for the research. This must be balanced against the costs of using the online services, which most often are directly charged to the client or they are eaten by the firm.


149. Professor Linda Ryan mentioned that if a student is unfamiliar with how the law library is organized the student often becomes frustrated when doing print research exercises, due to the amount of time it may be taking to complete the exercises. Ryan, supra note 62, at 31. Whether the library contains electronic or print sources, Professor Woxland’s conclusion was “[t]o be unable to use the law library effectively is to be functionally unable to study or practice law.” Woxland, supra note 6, at 464.

150. See Keefe, supra note 2, at 122 (discussing how the volume of information “may inhibit a student’s ability to locate, critically evaluate, and understand that information”).

151. See Greenburg, supra note 130, at 267 (stating that other bad research habits include not “evaluating the authenticity and reliability of sources that [the students] encounter online”).

152. Pettinato, supra note 55, at 29 (stating that “the presence of technology has led users to expect instant information”); see Mary Ellen Bates, Is That All?, EContent, Oct. 2003, at 1, available at http://www.econtentmag.com/Articles/ArticleReader.aspx?ArticleID=5579&ContextSubtypeID=13 (“Google . . . has taught us that it is no longer necessary to go through the effort of defining our information need. We just put a word or two into the search box and let a search engine disambiguate the query and provide an answer. We have learned to look
Another Contributor to Novice Research Skills Is the Students’ Past Experiences with Librarians

If students are fortunate to have used a school or public library, they may have turned to librarians because the librarians were seen as “the answer getters.” That is not the case in law school libraries. The law librarians look for opportunities to teach, and this is different from what students have faced in the past. For this reason, law school librarians often answer questions with questions, and head students in the right directions, but require that the students find the information themselves.

d) Learning a New Vocabulary Adds an Additional Challenge

If roadblocks such as being a novice in terms of research instruction and not understanding how libraries are organized were not enough, students are also legal vocabulary novices. Not only does the law have its own unique vocabulary, which students must learn, but students also need to understand through some possible results, and hope that we recognize the ‘right’ site from within the first page or two of results.”).


154. Pettinato, supra note 55, at 29 (discussing how “law students often expect librarians simply to get the answers for them”).


156. See Pettinato, supra note 55, at 29 (“If law students have not experienced libraries as instructional environments in the past, they may be slow to note the instructional context of their law library.”).

157. See Kelly Browne, The Top 10 Things Firm Librarians Wish Summer Associates Knew, 8 PERSP.: TEACHING LEGAL RES. & WRITING 40, 140 (2000) (discussing ten things that law firm librarians wish that summer associates knew, including “librarians are your friends”; they are “your ‘information partners.’”) (emphasis added)).

158. See, e.g., Gallacher, Hitchhiker’s Guide, supra note 114, at 152 (mentioning that “teachers [are] speaking a new language or, at the very least, a dialect of English with which [new students] are unfamiliar”); Milles, supra note 114, at 16.

159. BERRING & EDINGER, supra note 6, at 13 (discussing the different vocabularies necessary in every field, but how the “law not only creates but is also shaped by its language
how different legal authors use words and how the words are connected. As Professors Berring and Heuval noted, “students need a grounding in legal jargon before they try to understand the indexing and organizational systems used by legal research tools.” With respect to electronic research, an understanding of the legal vocabulary helps students make the best selection of search terms and connectors when conducting Boolean searches. For example, consider the following phrases—“intoxicated juvenile” and “drunk teenager;” the phrases describe the same individual; however, judges will use the first phrase in their

to a very high degree.”); see, e.g., Robert C. Berring & Kathleen Vanden Heuvel, Legal Research: Should Students Learn It or Wing It?, 81 LAW LIBR. J. 431, 442 (1989); Fine, supra note 33, at 70, 71; Douglas Laycock, Why the First-Year Legal-Writing Course Cannot Do Much About Bad Legal Writing, 1 SCRIBES J. LEGAL WRITING 83, 84 (1990). See generally S. WHITTINGTON BROWN, LEGAL TERMINOLOGY (Shelley Esposito ed., 2006) (providing students with common legal terminology from not only their first-year subjects, but upper-level topics as well).

160. See Gallacher, Mapping the Social Life of the Law, supra note 153, at 16, 17 (stating that “a researcher must correctly identify the right combination of words that a court might use to describe a specific, limited, legal question and predict the appropriate relationship between the selected terms,” which “is not as easy as . . . law students might believe,” given the large number of results received); see also Berring & Edinger, supra note 6, at 13–14 (discussing three problems with the legal language: (1) the common, everyday meanings of words are not the same as the legal meaning; (2) the law uses “terms of art”; and (3) legal vocabulary includes Latin phrases); WILLIAM STARTSKEY, LEGAL RESEARCH, WRITING AND ANALYSIS: SOME STARTING POINTS 363 (1974) (providing the principles of legal research and one principle is that “[l]anguage is inherently ambiguous and subject to interpretation”); Fine, supra note 33, at 70 (discussing how students need to be exposed “to defining legal terms that, from their context, may not be clear in terms either of their meaning or their importance”); Gallacher, Mapping the Social Life of the Law, supra note 153, at 9–10 n.47 (discussing one of the responses to Sanford N. Greenburg’s Chicago-Area Attorney Survey, in which a senior attorney mentioned that “[m]ore and more reliance on keyboard database searching, and less resort to books [which is] not necessarily a good thing because young associates often fail to develop concepts as a result of their myopic use of keywords” (citations omitted)). See generally BUSHARIS & ROWE, supra note 58, at 4 (discussing how developing a research vocabulary gives students words to search for in indices, table of contents, and other finding aids); JAMES EVANS, LAW ON THE NET 5 (Fred Horen ed., 1995) (discussing Lexis and Westlaw and the best approach to searching the databases: the “process of searching by key word can involve several attempts before you use just the right combination of words to get the material you want. Furthermore, you can miss important materials if [the authors] happen to use different words to discuss the same issue.”); Potter, supra note 36, at 291–92 (discussing how students are novices when it comes to substantive law).

161. Berring & Heuvel, supra note 159, at 442.

162. See BUSHARIS & ROWE, supra note 58, at 6 (discussing the importance of listing synonyms and antonyms).

163. This example was discussed by Professor Rebecca Trammell, Law Library Director and Associate Professor of Law at Stetson University College of Law, in a presentation to one of my second-semester research and writing classes.
opinions, whereas newspaper journalists will use the second phrase in their newspaper articles. The hardest part about research is getting started (after determining where to start) and knowing exactly what terms the court or the legislature used when writing the cases or statutes.

Given the roadblocks of students’ inexperience with research, libraries, and legal vocabulary, students also have the misconception that the “perfect” case is out there—a case that is directly on point to the legal issue that they are researching. A popular question heard by legal research and writing professors every semester is “When do I stop researching?” Typically, students will stop researching too soon, once they believe they have such a

164. See TEPLY, supra note 39, at 73 (discussing how “[a] researcher may miss relevant documents when a court has used terms or phrases different from those used in the search query to address the issue”); Marilyn R. Walter, Retaking Control Over Teaching Research, 43 J. Legal Educ. 569, 569 n. 1 (1993) (discussing how Boolean searches “will retrieve the documents in which the words appear in the relationship designated, e.g., dog or canine and sniff w/15 apartment or home”).

165. See generally Greenburg, supra note 130, at 260 (explaining how students can conduct word searchers in “an online case database . . . without necessarily understanding how the database is organized”); Pettinato, supra note 55, at 21 (discussing the negative feelings that law students get during the search process, especially because there is “an expectation of uncertainty at the beginning of the process” (quoting CAROL KUHUTHAU, SEEKING MEANING (2004)). Other negative feelings include “confusion, frustration, and doubt, which can erect barriers to learning.”); Spanbauer, Handout, supra note 17, at 1 (noting that students also face the roadblock of not understanding “the procedural and evidentiary posture of the cases they read, and an unfamiliar common law system”).

166. See Berring, supra note 6, at 13 (stating that “[f]inding the case that contained the exact point, the case on ‘all fours,’ be[comes] an obsession”). The Author heard a wonderful analogy at the plenary session of the Legal Research and Writing Conference in July 2008; Professor Mary Beth Beazley stated, “Research is like dating; writing is like marriage.” Shelia Simon, Mary Beth Beazley & Hollee Temple, Plenary Presentation, Divine Secrets of the Ha-Ha Sisterhood (Thirteenth Biennial Conference of the Legal Writing Institute, Indianapolis, Ind., July 15, 2008) (notes on file with author). “Research is like dating” because the first-year students believe that they are looking for the perfect case, directly on point. Id. “Writing is like marriage” because the first-year students must work with the cases that they have. Id.

167. See, e.g., ASS’N OF LEGAL WRITING DIRS. & DARBY DICKERSON, ALWD CITATION MANUAL: A PROFESSIONAL SYSTEM OF CITATION R. 43.3 (3d ed. 2006) (providing guidance on the appropriate number of sources that should be cited, which depends partially on the type of document being written) (there is not a corresponding rule in The Bluebook that answers this question); MURRAY & DESANCTIS, supra note 148, at 130; WILLIAM H. PUTMAN, LEGAL RESEARCH 394–97 (Shelley Esposito ed., 2006) (devoting a section to the discussion of when to stop); WREN & WREN, supra note 58, at 129 (explaining how “[t]here is never an easy or automatic answer to this question” but that researchers should not cut corners); Whisner, supra note 8, at 396 (explaining “[e]very project has to end sometime,” but “[r]esearch could go on”).
“perfect” case, or continue researching beyond when they need to because they have yet to find the “perfect” case.

By stopping their research too early or by continuing to research for the “perfect” case, law students are developing bad habits. In the real world, attorneys must find the best authority and understand how the rules of law work, but attorneys must also balance a number of competing interests—from the client’s fiscal limitations to time limitations and other competing projects. Attorneys do not have the time to do the “extensive” research they did during law school in their legal research and writing class or for a law-review-type paper. The research is not always “complete” in the real world, or better yet, “complete” has a different definition.

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168. See, e.g., Gabrielli, supra note 22, at 2. The author, an associate judge of the New York Court of Appeals, wrote

Legal research . . . does not terminate once an issue has been identified, or relevant cases have been discovered, and a rule of law determined. Rather, the research effort must proceed until the [attorney] has a thorough understanding of the rationale and reasons behind the formulation of the rule. When an authority that appears to be controlling has been found, it is often too easy to lose sight of the policy reasons behind the result reached in the earlier decision. The common law is an ever-evolving process, and the former rules of law may be modified as the circumstances leading to their formulation change.

Id. This not to say that the attorney needs to always present policy arguments, but he or she must be “alert to the importance of understanding how a rule works and why it was necessary to formulate it.” Id.; Stephen Elias & Susan Levinkind, Legal Research: How to Find & Understand the Law 2/2 (Richard Stim ed., 10th ed., 2002) (“[I]n the legal research process there are lots of opportunities for dead ends, misunderstandings and even mental gridlock. Answers that seemed in your hand five minutes ago evaporate when you read a later case or statutory amendment.”).

169. See, e.g., Ellen M. Callinan, Legal Research and the Summer job . . . Advice From the Law Firm: How to Survive Summer Associate Research . . . and Thrive!, 7 PERSP.: TEACHING LEGAL RES. & WRITING 110, 113–14 (1999) (stating that “[t]oo many novice researchers spend endless hours searching for a case that matches their facts perfectly” and when students cannot find a case that matches their facts perfectly, they “give up in despair that no such case exists”); Whisner, supra note 8, at 396 (discussing how “clients can’t afford to have their lawyers explore every byway”).

170. See Berring & Edinger, supra note 6, at 7–8 (discussing competing interests such as the cost of research, the time of research, and how much the client will be willing to pay); Sourcebook, supra note 69, at 161–62; see also Achieving Excellence, supra note 36, at 346 (discussing strategies lawyers can use to avoid unnecessary research costs for clients).

171. See Sourcebook, supra note 69, at 161–62.

172. See Murray & DeSanctis, supra note 148, at 7, 127 (discussing how attorneys must determine the scope of their research and how lawyers “cannot always adopt a ‘leave no stone unturned’ plan in which [the attorney] will try to completely exhaust every possible source for the law.” In addition, “no one—no law student, no law professor, and certainly no practitioner—has unlimited time for research.”); Wise, supra note 124, at 124 (discussing that
And despite being novices, law students appear to be very confident when they start law school. They are probably over-confident because they were straight-A students at “such and such” outstanding undergraduate institution, or their confidence is merely a facade. Either way, there is uncertainty in the real world “numerous problems do not permit an exhaustive search, and many more do not require one”; see also Brink, supra note 59, at 308 (stating that “[u]pon graduation, students at best are proficient at basic legal research using a handful of standard legal research tools”); Sanderson, “Real World”, supra note 57, at 72 (discussing how in law school, students only face “their own exhaustion factor,” whereas in the real world, attorneys are faced with the pressures of time and money); Whisner, supra note 8, at 396 (discussing how “[e]very project has to end sometime. And yet, with the plethora of information sources available, there is almost always more that one can do.” However, given limitations such as how much the client is willing to spend, “every research needs to find a time to stop.” Determining when something less than “complete” is appropriate “requires considerable professional judgment. We seldom do all we possibly could, but do we stop here? or here? Stop too soon and you miss something important—and give bad advice or lose a case. Stop too late and you waste time and money.”).  

173. See Gallacher, Who Are Those Guys?, supra note 66, at 154–55 (noting that “incoming law students overestimate their research skills” and concluding that while “incoming law students have a strong self-belief in their reading, writing, and research skills, it appears that this belief is founded on the perception that previously successful strategies for performing well in an academic setting will continue to prove effective in law school.”). Gallacher further opines, As with legal writing, it is possible that overconfidence in research skills leads to incoming students to take a closed-minded approach during the research portion of their first year writing and research course. Students feel themselves to be capable, even skilled, researchers, and therefore, are likely disinclined to believe that legal research will pose any substantial difficulties for them.  

Id. at 191. See generally Lawrence S. Krieger, The Law School Experience: Institutional Denial About the Dark Side of Law School, and Fresh Empirical Guidance for Constructively Breaking the Silence, 52 J. LEGAL EDUC. 112 (2000) (focusing on the transition of law students from self-confident students with high self-esteem to depressed students); Mary Whisner, Reference Librarians Do Not Work in Steel, 92 LAW LBR. J. 601, 602 (2000) (discussing another reference librarian’s remarks that she “enjoy[ed] seeing the law students at different stages of their law school life—from first-year orientation when they are at once eager, nervous, self-confident, and confused, to graduation when they are happy, proud, tired, and worried about the bar exam”).  

174. See Pettinato, supra note 55, at 31 (discussing a number of reasons why law students do not ask law librarians for help, including, “They think they know the way,” and, “They know they don’t know the way, but believe some guess-work will get them on track”); see also Gallacher, Who Are Those Guys?, supra note 66, at 189 (observing a survey suggesting “that incoming law students are, if anything, even more confident in their research skills than they are in their writing abilities”).  

175. Pettinato, supra note 55, at 21; see also Whisner, supra note 8, at 393 (“Law Students and young lawyers do not have the secure body of knowledge that experienced attorneys and
involved in legal research: uncertainty about where to begin, uncertainty about whether the right information has been found, uncertainty about whether all the right resources were consulted in the research process, and uncertainty about whether there is more information to find. Uncertainty is part of the research process, and students need to understand that and learn to feel comfortable with this uncertainty. As the students gain research experience, the students will understand the trees and the forest, and “they will be able to make informed choices.”

2. Students Only See the Trees and Do Not Understand the Forest

Students get so engrossed in learning about the trees—the different sources available—that the students lose track of the forest—developing a research plan

professors generally have.” (emphasis added)).

176. See Barbara Bintliff, Electronic Resources or Print Resources: Some Observations on Where to Search, 14 PERSP.: TEACHING LEGAL RES. & WRITING 23, 23 (2005) (stating that the first decision that a legal researcher needs to make is “where to look for the information”); see, e.g., SLOAN, supra note 31, at 4 (mentioning that the “answer to a research question may not be found exclusively in statutes or court opinions or administrative regulations”; sometimes, the researcher must look at all the primary sources to determine an answer).

177. See STASKEY, supra note 160, at 360 (discussing how “in many instances, there are no definitive answers to legal problems”).

178. Marsha L. Baum, Ten Tips for Moving Beyond the Brick Wall in the Legal Research Process, 10 PERSP.: TEACHING LEGAL RES. & WRITING 20, 20 (2001) (discussing the “brick walls” that students face in legal research, such as finding a lot of information “but not a direct answer, so they feel that they are missing something”).

179. See id. (discussing how a novice researcher may have finished a research project, but not realize it); Diamond, supra note 33, at 87 (“Not knowing when to stop researching is common.”).

180. See Simons, supra note 130, at 357. Professor Simons discusses three key concepts: [L]egal decision making has an inherent degree of indeterminacy, which may be reduced but never eliminated; the lawyer’s job is to identify and isolate the indeterminacies of the problem, so that outcomes may be provisionally predicted and influenced; and structure and method in the research and writing process are essential to the identification, isolation, and control of the unavoidable indeterminacies.

Id.; see Baum, supra note 178, at 22 (mentioning that sometimes there is no clear answer to a research problem).

181. See Pettinato, supra note 55, at 21 (talking about how law students need to have “a tolerance for uncertainty,” and how law librarians can “nip[] learning-impeding anxiety in the bud.”). The uncertainty continues in the real world. Whisner, supra note 8, at 396 (discussing how “less than complete research” is sometimes necessary, but knowing when to stop researching can have financial consequences to the client or the attorney may give bad advice, which could result in additional consequences).

182. Whisner, supra note 8, at 396.
or strategy.\textsuperscript{183} The task is more important than just finding the right cases to use in the particular writing assignment. The task involves thinking about what strategies were used to find that particular case, evaluating the search strategies used, and thinking about the different sources consulted in the process. Students focus on the research project to be completed, not on improving the strategies used when working on that particular project, or how similar search strategies could be used in future research projects—research skills are transferrable.\textsuperscript{184}

Research is a highly complex process\textsuperscript{185} that requires learning about the trees and the forest simultaneously.\textsuperscript{186} The trees are a myriad of legal sources available to a researcher, and there are fundamental guidelines that help order the trees within the forest. Fundamental guidelines include determining a primary source from a secondary source, determining what is binding authority and what is persuasive authority, and determining the hierarchy of sources; these guidelines are needed when thinking about the trees.\textsuperscript{187}

\begin{itemize}
\item \textsuperscript{183} Berring & Heuvel, supra note 159, at 439 (In fact, “[a] process-oriented research program gives students tunnel vision . . . because they have no idea what the larger picture of legal research [the forest] looks like.”). “[T]he fundamental question [is] how we teach students to search for a needle in a haystack when we have not properly educated them on how to find the haystack.” Keefe, supra note 2, at 125. Students need to understand “the conceptual arrangements of the different research tools [the trees].” Berring & Huevel, supra note 159, at 442; see Simons, supra note 130, at 358 (discussing how first-semester legal research and writing students must be taught the basics or mechanics first before learning the overall process).
\item For example, students “know how to find a rule in the Code of Federal Regulations, but that means little if they do not understand how that rule finds its place in our scheme of law.” Brink, supra note 59, at 308.
\item See Seligmann, supra note 34, at 183.
\item \textsuperscript{184} See Seligmann, supra note 34, at 183.
\item \textsuperscript{185} E.g., Keefe, supra note 2, at 131; Pettinato, supra note 55, at 29; Connie Lenz, AALL Program Reviews: The Library’s Role in Educating Lawyers: Considering the Carnegie Report, 28 ALL-SIS NEWSL. (ALL-SIS, Boston, Mass.), Fall 2008, at 4, 5; see also Danner, supra note 47, at 192 (explaining that the “legal information environment is complex and its boundaries are porous”).
\item However, Professor Linda Edwards discusses how learning about research strategies is something that students learn over the course of several assignments, and the process becomes most evident when the students are working on an appellate brief in their second-semester classes. Edwards, supra note 15, at 35. But Professor Silecchia discusses how students need to first master research skills in the individual sources, before attempting to design a research strategy. Silecchia, supra note 54, at 214 (describing the skill of designing a research strategy as “a sophisticated process”).
\item Katcher, supra note 52, at 46 (discussing Bloom’s Taxonomy and how “no substantial legal research endeavor, no strategy, no creative approach, may seriously be considered without a firm knowledge of the first level of cognition in the subject area, that is, the learning of the sources of primary and secondary law, how the laws are categorized and classified, and what finding aids are available”). Other relationship guidelines include understanding the institutions that create law. See, e.g., Wren & Wren, supra note 58, at 1.
\end{itemize}
In learning about the forest, the students are learning the skills of developing a research strategy or plan—“to think through the logic of how these relevant and useful resources fit together in a coherent field of authority. Actually working through this process, seeing how different resources fit together, and understanding where there are gaps and how they might be filled.”\(^{188}\) Understanding the forest requires understanding the interrelationship between all the myriad of legal sources and developing research strategies to navigate through the almost infinite universe of legal authorities.\(^{189}\) Learning the research process or the “forest” is critically more important than knowing every detail about the “trees,” but students cannot learn the forest until they understand what the forest is comprised of, the trees.\(^{190}\)

Students cannot learn research strategies without first understanding the different resources and the arrangement of the different resources.\(^{191}\) In fact, students are impatient with the learning process when it comes to learning how to conduct legal research.\(^{192}\) It is only once the students understand the basics that they can then learn how “to evaluate the quality of the tools and the quality of the information they find in them.”\(^{193}\)

Effective legal research does not take place in a vacuum; it starts “within a sophisticated context of background information and knowledge.”\(^{194}\) Gaining this sophisticated context takes time and experience; the context is not acquired quickly.\(^{195}\) Students need to be confident researchers, who “use[ ] existing skills

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190. SLOAN, *supra* note 31, at 1 (“As a starting point for learning about how to research the law, it is important to understand some of the different sources of legal rules.”); Seligmann, *supra* note 34, at 183 (“For a new attorney, knowledge of substantive law and bibliographic information are less critical than knowledge of the research process.”).

191. Berring & Heuvel, *supra* note 159, at 442–43. Several authors referred to learning about the different legal resources as starting with the basic “building blocks” or learning the “nuts and bolts.” *E.g.*, Katcher, *supra* note 52, at 46, 47.


193. Berring & Heuvel, *supra* note 159, at 442–43. Judges will assess an attorney’s research skills by evaluating both the process (the forest) and the results (the trees). Margolis, *supra* note 5, at 87.

194. Bintliff, *supra* note 54, at 258. *But see* Whisner, *supra* note 8, at 393 (discussing how “law students and young lawyers do not have the secure body of knowledge that experienced attorneys and professors have”).

195. See KUNZ ET AL., *supra* note 30, at 27 (developing an understanding of the research process will prevent a researcher from losing track of the topic, chasing tangents, or spending too much time in one place).
and knowledge about legal resources and appl[y] them to the unknown area.”

3. Students Have a Misconception of the Amount of Time That Legal Research Takes and the Glamorous Nature of Legal Research

Students need “to understand that they are not proceeding down a freeway with clearly marked exits.”

Law students are interested in finding the easiest and quickest path to completing a project, and the easiest and quickest path is not necessarily the best or most complete path. The “short cut” mentality that develops due to technology does not help our students when faced with a research project. Researching the law is not always a quick task, and students need to feel the “pain” and take the time and effort needed to find the best authority, not the “good enough” authority.

Conducting legal research is not glamorous; it requires time and patience,

196. See Seligmann, supra note 34, at 183.
198. See MacLachlan, supra note 40, at 648 (stating that law students can be tempted to “take the path of least resistance in learning legal research skills and sources”); see also Gallacher, Who Are Those Guys?, supra note 66, at 192 (stating that since “students are . . . devoted to the internet as an information source, . . . their approach to information acquisition tends to be passive rather than active”); Simons, supra note 130, at 356 (discussing how the students do not understand how to get from a factual scenario to a “comprehensive analysis of the problems presented by the facts, in all their complexity and indeterminacy”).
199. See Fritz Snyder, Improving Law Student Research Skills, in EXPERT VIEWS, supra note 6, at 99, 100 (“Legal research is a complex undertaking, with many possible avenues to the same end. Some are more efficient than others.” (emphasis added)); KUNZ ET AL., supra note 30, at 425 (discussing how “there is no one ‘right’ or ‘best’ way to research any particular situation”).
200. See Kosse & ButleRitch, supra note 188, at 71 (discussing how “technology has the allure of offering quick shortcuts to seemingly time-consuming activities” and for our students with the enormous time demands, “[t]here is a tendency . . . for students to want to adopt any sort of shortcut that they can”).
201. Terrell, supra note 110, at 499; see Kosse & ButleRitch, supra note 188, at 71 (stating that “[e]xposing students to CALR [computer-assisted legal research] too early in their law school careers would likely give them the impression that they can do all their research quickly and painlessly.” In addition, “[s]hortcuts can conceal the true complexity of an issue and have the effect of lulling us into complacency about the amount of effort that is truly required for a given project.”).
202. In fact, one author put legal research “somewhere below legal writing, in the pantheon of law school courses.” Katcher, supra note 52, at 52. Professor Roy Mersky, long-time advocate for legal research instruction mentioned that “as bad as that position and status [for legal writing professors] may have been within the law school community, the teaching of legal research, eclipsed by legal writing, was for some time relegated to an even lesser position.” Mersky, supra note 80, at 396.
flexibility, creativity, and redundancy. Television series such as *Law and Order*, *L.A. Law*, *Ally McBeal*, *Shark*, or *Judging Amy*, or movies such as *The Firm*, *To Kill a Mockingbird*, *Pelican Brief*, *Anatomy of a Murder*, and *Chicago* rarely mention legal research. Instead, television series and movies start the viewers from the point at which a large portion of research has been completed because the attorney is shown in the courtroom trying the case or presenting oral arguments in an appeal. The audience does not see attorneys pouring over the books, searching carefully through the vast universe of electronic sources, or reading a large treatise and many cases just to get an understanding of a complex area of law at issue in the case. Sitting amongst a pile of books or behind a computer screen for hours is not glamorous.

And the legal research process is deceiving. Even with all the electronic resources, conducting legal research is a complex process. When students enter law school, they expect their first-year doctrinal classes will be challenging; they have seen or heard about the movie *The Paper Chase* or talked to attorneys or alumni. There is, however, a misconception that the legal research and writing classes will be easy simply because students have already spent fifteen or more years learning to write. And what about research?

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203. Kunz et al., supra note 30, at 27 (“Good legal research takes a lot of time, hard thinking, and discipline.”); Partnership and Solutions, supra note 7, at 9 (discussing how legal research is “very loopy, iterative, back-tracking process where things don’t always work”).

204. However, research was praised in the 2007 movie, *The Great Debaters*, starring Denzel Washington; the movie was a true story.

205. Unless of course you look as good as Julia Roberts did while conducting research in *The Pelican Brief*. Simon, Beazley & Temple, supra note 166. Contra Berling & Edinger, supra note 6, at 8 (discussing how the authors tried to balance between the “tedium of detail inherent in discussing individual research tools” and the “excitement of legal research”); Whisner, supra note 8, at 391 (“Researching is fun.”).

One author, Professor Ellen Callinan, actually encouraged novice researchers to have fun when conducting research. Callinan, supra note 169, at 115. Students and attorneys should have fun while conducting research because not only is research a fact of life, but within the law firm hierarchy “research is delegated to the most junior attorneys”; “[j]ust when a lawyer really learns how to perform legal research well, he or she graduates to more ‘desirable’ tasks. It’s no wonder this critical responsibility is perceived as drudgery.” Id. (stating, “It’s fun to find information!”).

206. See Bintelff, supra note 176, at 23 (“A perplexing aspect of legal research is the multiplicity of sources in electronic and print formats . . . [which] often makes understanding already complicated legal resources more difficult,” especially due to the duplication of sources, both in print and online (and online in several different places)). Leiter explains that legal research is complex given a number of factors including enormous amount of materials available to researchers and the variety of formats in which the materials are available, which “are changing, combining, and re-combining at an alarming rate.” Leiter, supra note 4, at 24.

207. E.g. Mersky, supra note 80, at 397 (discussing how “[s]tudents do not [even] enter law school with basic skills in legal writing”).
Students know that information can easily be found on the Internet by simply typing in a couple of words or phrases in a search engine, such as Google.\footnote{208} As Professor Hicks mentioned, “It is a mistake to speak of any of the processes of finding the law as mechanical processes, for one has not truly found the law until one understands it, and this requires a knowledge of substantive law which comes only with the passage of time and much experience.”\footnote{209}

This leads to another aspect of the time and unglamorous research roadblock—students’ expectation that research will come easy.\footnote{210} When given a research exercise in legal research and writing courses, their goal, for the most part, is to complete the research exercise quickly, and move on to the next task,\footnote{211} especially a graded writing assignment. The exercises are designed to help the students understand different research sources, “the mechanics,” and understand the strategies of researching in the basic legal sources.\footnote{212} Also, the students should start to understand the relationship between the sources, and begin to see the similar research strategies that may be used with different sources.\footnote{213}

\footnote{208. BERRING \& EDINGER, supra note 6, at 1 (discussing the dilemma in research training—the yin (the first-year law student who is experienced in using search engines and online databases) and the yang (legal information, which has its foundation in the print resources)); PARTNERSHIP AND SOLUTIONS, supra note 7, at 9; Bates, supra note 152. Students “think if they put in a few search terms, they’ll find the resources they need. . . . [B]ut legal research is more nuanced.” PARTNERSHIP AND SOLUTIONS, supra note 7, at 9; Brink, supra note 22, at 16 (stating that the “‘Google generation’ think[s] they know enough about conducting legal research after completing their basic research and writing courses”).

209. Frederick C. Hicks, The Teaching of Legal Bibliography, 11 LAW LIBR. J. 1, 6 (1918); see also Walter, supra note 164, at 571; supra notes 183–96 (discussing the trees).

210. KUNZ ET AL., supra note 30, at 6 (stating that “good legal research is neither fast nor easy”); Brink, supra note 59, at 308 (stating that “students tend to view legal research as if it were as simple as following a cookbook recipe”).

211. See ELIAS \& LEVINKIND, supra note 168, at 2/2 (stating that legal researchers in general are impatient, “preferring to make a quick stab at finding the particular piece of information they think they need”). Impatience may also be due to the students’ hope that one class in law school will be “easy,” or a misconception that the class—legal research and writing—should be easy given the number of credit hours, the status of the instructions, or whether the course is graded. See supra notes 207–11; infra notes 214–17, 223–29.

212. E.g., AMY E. SLOAN \& STEVEN D. SCHWINN, BASIC LEGAL RESEARCH WORKBOOK xi (3d ed. 2007).

213. See Ryan, supra note 62, at 31 (“Using well-designed exercises is an effective way to make students examine materials in detail, focus on the interrelationship of sources, compare and contrast similar materials, and think about when and how they might use the materials in the future.”); supra notes 207–10; infra notes 214–17.

In addition, when designing research exercises, Professor Terry Jean Seligmann suggests following these four guidelines: “(A) Integration—combine research assignments with analytical/writing assignments; (B) Practice—vary the type of research, with multiple opportunities for research training; (C) Progression—sequence assignments to help students
Contrary to what the students believe, legal research is not easy.\textsuperscript{214} Legal research is not simply finding a case on point.\textsuperscript{215} Technology has made legal research seem deceptively easy: plug in a couple of words with a connector or within quotation marks and hundreds of results appear.\textsuperscript{216} The more legal information that is available online, the more research tools and techniques must become more sophisticated.\textsuperscript{217}

B. The Roadblocks for Law Schools

Legal Research has forever been a stepchild in legal education.\textsuperscript{218}

If students fail to take a specific substantive class—bankruptcy, for example—they will still be attorneys; if students fail to take legal research and writing classes, they face enormous consequences should they decide to use their law degree.\textsuperscript{219} Legal research instruction is important,\textsuperscript{220} but “[l]egal progress toward independence; [and] (D) Planning—allow students to plan and reflect on the research process.” Seligmann, \textit{supra} note 34, at 184.

\textsuperscript{214} In Professor Gallacher’s survey, 81.1\% of the students included that they were either “very confident” or “somewhat confident” in their research skills.” Gallacher, \textit{Who Are Those Guys?}, \textit{supra} note 66, at 178.

\textsuperscript{215} \textit{See} Callinan, \textit{supra} note 169, at 114 (discussing how novice researchers need to open their minds to analogies and to stop looking for that one “perfect” case, directly on point); Sanderson, \textit{“Real World”}, \textit{supra} note 57, at 72 (providing research tips from a litigator who admits that he “tended to be sidetracked by the ‘perfect’ case from a nonbinding jurisdiction,” which is limited in its usefulness due to the fact it is from a nonbinding jurisdiction).

\textsuperscript{216} \textit{See} Shear, \textit{supra} note 145, at 10 (acknowledging that even though our students have “an intimate familiarity with digital information[, this] does not make them immune from poor searches”); Walter, \textit{supra} note 164, at 571 (discussing how using one search term in a database containing an enormous number of documents can still result in “the retrieval of thousands of documents”).

\textsuperscript{217} \textit{See} Mills, \textit{supra} note 7, at 347–48. Professor Robin Mills said that the more accessible [legal information] becomes, the more competitive legal research demands will be. No longer will a student or lawyer be able to omit researching in court records and briefs, in very old or primarily local court reports or in administrative agency materials, for they are now accessible in places . . . and will have to be consulted in order to keep up with the opposition.

\textit{Id.} at 348. Actually, the results received are only as good as the database and searches selected. \textit{See} Shear, \textit{supra} note 145, at 10 (stating that “[o]nline databases and search engines are only as smart as the searches they are asked to perform”).

\textsuperscript{218} Robert C. Berring, \textit{A Sort of Response: Brutal Non-Choice}, \textit{4} \textit{PERSP.: TEACHING LEGAL RES. & WRITING} 81, 81 (1996); Woxland, \textit{supra} note 6, at 459 (describing the “stepchild,” legal research, as “unwanted, starved, and neglected,” back in the late 1980s).

\textsuperscript{219} Gary R. Roberts, Dean, Welcome Presentation (Thirteenth Biennial Conference of the Legal Writing Institute, Indianapolis, Ind., July 15, 2008). Students can also experience consequences in law school; “[c]areful, thorough research can make the difference between a winning case and a debacle, between a superlative seminar paper and an academic flop.”
research is [also] a skill” that requires considerable resources in terms of the curriculum, credit hours, financial resources, and delivery. The first roadblock for law school administrators is the law school curriculum. When designing the required curriculum, Professor Hicks states that “[i]t the moment that the decision is made to elevate the subject into a formal part of the curriculum, the Dean of a law school is confronted with the problem of finding a place for it in the curriculum.” How many credits and what courses should be required in a student’s legal education? This, in turn, affects the number of credit hours devoted to legal research and writing classes, the classes during which most of the research instruction takes place currently. Law school administrators are indicating the value or importance the law school is placing on legal research and writing courses by giving the courses certain credit hours; the more credit hours devoted to legal research and writing classes, the more emphasis the law school is placing on the courses. Students, in turn, can determine the “importance” of legal research and writing classes based simply on the credit hours designated to the legal research and writing classes.

Whisner, supra note 8, at 391.
220. See supra Part II.
221. SOURCEBOOK, supra note 69, at 26 (indicating that various factors influence how research and writing programs are designed); Hardy, supra note 22, at 223.
222. Hicks, supra note 209, at 4.
223. Credits given to one first-year course must come from somewhere—another first-year course. Gregory E. Koster, Teaching Legal Research: The View from Utopia, in EXPERT VIEWS, supra note 6, at 53, 62; SOURCEBOOK, supra note 69, at 78–79 (discussing the decision about how many credits to assign to first-year legal writing courses).
224. Rosalie M. Sanderson, Point of Need Analysis: Improving Legal Research Skills by Providing Specialized Training at the Point of Need, in EXPERT VIEWS, supra note 6, at 79, 80 [hereinafter Sanderson, Point of Need Analysis] (discussing how the amount of time, the number of credit hours, and how the course is graded factor into how students view legal research and writing courses); see Potter, supra note 36, at 290–91 (“Factor in the low esteem legal research has in relation to other law school courses and you have a pretty compelling explanation for why students are not interested in spending a great deal of time in the library.”); see also James B. Levy, The Cobbler Wears No Shoes: A Lesson for Research Instruction, 51 J. LEGAL EDUC. 39, 46 (2001) (explaining professors’ attitudes towards teaching legal research and one reason for the negative attitudes is that administrators “generally do not value that part of the curriculum that prepares students to enter the practice”).
225. See Gallacher, Who Are Those Guys?, supra note 66, at 161 n.19 (stating that “the student may believe that if the school has drawn particular attention to its writing and research program in promotional materials, the subject might be more difficult to learn than other subjects”).
226. Cooper, supra note 6, at 12; Kory D. Staheli, Motivating Law Students to Develop Competent Legal Research Skills: Combating the Negative Findings of the Howland and Lewis Survey, LEGAL REFERENCE SERVICES Q., vol. 14, nos. 1/2 (1995), at 195, 201; see Edwards,
The second roadblock for law school administrators is the financial pressures. The budget determines whether full-time faculty, librarians, or adjuncts, are hired to teach research and writing classes, as well as whether full-time research and writing professors are on short-term contracts capped

227 supra note 15 at 30 (stating that “[s]tudents perceive that Legal Research and Writing is not as important as their ‘substantive’ courses”). Students do not understand the importance of the skills taught in legal research and writing classes. Mills, supra note 7, at 345–46 (mentioning that students feel that the course requires too much work for too few credits or for a pass/fail grade).

Three factors that affect how a student will evaluate the importance of a legal research and writing class are the number of credit hours, whether the course is pass/fail or graded, and the fact that research skills are not reinforced in the second and third years. Woxland, supra note 6, at 454–55.

“Law students consciously or unconsciously maintain many balances.” Lynch, supra note 1, at 436. These balances include law school and personal life, one course and another, and within legal research and writing courses, time devoted to research versus time devoted to writing. Id.

Many of “how to succeed at law school” books do not even address research (and I would not expect each author to address every aspect of the law school experience; it would be impossible); the books focus on reading and briefing cases, note taking, study groups, extracurricular activities, and final exams. Compare, e.g., ANN L. IUIMA, THE LAW STUDENT’S POCKET MENTOR: FROM SURVIVING TO THRIVING (2007) (focusing on the students’ most frequently asked questions), and HELENE SHapo & MARSHALL SHAPO, LAW SCHOOL WITHOUT FEAR: STRATEGIES FOR SUCCESS (2d ed. 2002) (focusing on how to study the law generally, but containing a chapter on the sources of law), with, e.g., DAVID HricK, LAW SCHOOL BASICS: A PREVIEW OF LAW SCHOOL AND LEGAL REASONING (2000) (containing a chapter entitled, “Hints for Better Legal Research,” chapter 8); McClurg, supra note 148, at 276 (discussing the continuing discussion about print versus electronic resources, and how it is important to learn how to research in print); SHANNA CONNELL NOYES & HENRY S. NOYES, ACHING YOUR FIRST YEAR OF LAW SCHOOL: THE TEN STEPS TO SUCCESS YOU WON’T LEARN IN CLASS (1999) (suggesting that law students should read chapter five, “Legal Research,” when they receive their first assignments in legal research and writing); KIMM ALAYNE WALTON, WHAT LAW SCHOOL DOESN’T TEACH YOU . . . BUT YOU REALLY NEED TO KNOW ch. 5 (2000) (providing a chapter on “How to Crush Research and Writing Assignments,” and the chapter contains a sub chapter on “Finding What You’re Suppose to Find: How to Do the Research” that contains a lot of helpful tips and strategies). By ignoring the fundamental nature of legal research, the students are not understanding the importance of the research skills they are learning in research and writing classes. Imagine students’ shock when they get their first assignment during that first summer clerkship, and they find themselves doing independent research and wishing that they had paid more attention in their legal research and writing classes.


228 Id. (mentioning that each “school has different assets in terms of personnel and resources”); see Katcher, supra note 52, at 52 (advocating that legal research should be “taught by trained and capable instructors”); Mersky, supra note 80, at 396, 401 (stating that as in 1992 when the MacCrate Report was published, the same is true today “that not enough money, not enough time, and not enough concern are devoted to legal writing programs” and hoping that increased attention on research will bring a focus on who is teaching legal research).
at a specific length of time, or on longer-term contracts, or given tenure-track positions. Likewise, financial pressures may affect other departments, such as the law library.

The third roadblock for the research and writing faculty is the course curriculum, specifically, how much time to devote to research instruction within an integrated course. There is the time pressure of trying to accomplish fundamental research instruction within the first-semester legal research and writing course; especially because the title of the course—Legal Research and Writing—indicates that research is not the only skill taught.

229. Veteran research and writing professors who have been at the same law school cost more than brand new, full-time research and writing professors, which cost more than adjuncts. Also the status of the individuals teaching legal research and writing courses may contribute to whether students think the courses are important. See Sourcebook, supra note 69, at 66–69 (highlighting the different staffing decisions that need to be made); id. at 81–119 (addressing the different staffing models).

Connected with the challenge of the legal research and writing curriculum is the question about who should teach research in an integrated course. In 2008, seventy-four programs reported the research and writing faculty taught research, fifty-two programs reported that librarians taught research, sixty-six programs reported that research instruction was taught by both research and writing faculty and librarians. 2008 Survey Results, supra note 56, at 10 (question 18). Financial decisions involved with having law librarians teach legal research include whether research instruction is part of the librarians’ normal job responsibilities or whether librarians will receive additional compensation for teaching research to the first-year students. In either case, there also needs to be a discussion about what skills will be covered in the limited amount of time. See infra notes 230–37 and accompanying text.

230. Teaching legal research is a time-intensive task. Berring, supra note 6, at 26 (“A time commitment . . . is very different than that required by the normal large lecture format of the first-year course, and of course, is quite different from the situation where the only feedback required from the professor is the one exam to be graded at the end of the course.”). And determining what to teach is a difficult decision. Gallacher, Hitchhiker’s Guide, supra note 114, at 192–96 (presenting many suggestions about what legal research curriculum should contain).

231. Id. at 205 (stating that legal research programs “must accomplish this task [the challenge of teaching legal research] in a short period of time, often sandwiched into a legal writing program that faces its own series of daunting challenges”).

232. There are many names for this first-year course: Research and Writing, Legal Methods, Lawyering Skills, Lawyering Process, etc.

233. See Mersky, supra note 80, at 396, 398 (discussing “a whole smorgasbord of other activities” including advocacy, counseling, writing, and legal methods, calling legal writing professors, “jacks- (and jills-) of-all-trades,” and adding to the list of skills that are discussed in legal writing text to include drafting, case briefing, organization, constructing effective paragraphs, etc.). Contra Partnership and Solutions, supra note 7, at 12 (containing a statement by Chris Mickus, partner at Neal Gerber & Eisenberg LLP, that he “would put more emphasis on research skills than writing skills. . . . It is more important to understand where to look for an answer. It’s a matter of understanding what’s in the library and the nuts and bolts of how it works.”).
Most of the fundamental research instruction takes place in the first-semester research and writing courses and is reinforced in the second semester, and "[t]here is simply not enough time to cover everything in depth or to practice everything that has been covered." Precious time cannot be wasted on research materials relevant to only the upper-level courses. And computer research only compounds the challenge of time limitation. There are only so many minutes that can be allotted to research instruction given the students’ deficiencies in writing skills. Over the years, the focus has been on correcting the students’ deficiencies in writing skills, and research instruction has suffered.

In addition to the curriculum decisions, there are also issues such as how the information will be delivered, how the course (or the research portion of the legal research and writing course) is graded, and what should be the

234. Shapo & Kunz, supra note 12, at 80; see also Katcher, supra note 52, at 46 (discussing the unrealistic expectations put on the legal research and writing programs to cover basic research skills, plus effective research strategies, all within the limited time designated for the first-year legal research and writing classes). The focus is a balance between introducing the students to the myriad of legal resources, while stressing the importance of developing a research plan and good research strategies. Legal research instruction competes with analysis and writing instruction. Simons, supra note 130, at 358. This problem is probably one of the major factors of why some law schools are considering or have changed their legal writing programs to three or four semesters, instead of only two semesters.

235. E.g., Shapo & Kunz, supra note 12, at 80.

236. As was stated in the Sourcebook, “[c]hoosing the resources to cover in a first-year LRW course is difficult.” Sourcebook, supra note 69, at 26. The coverage also includes the decision of about the format—electronic, which includes fee-based and free resources. Id. at 27.

237. E.g., Mersky, supra note 80, at 399 (advocating, again, that focusing on the students’ legal writing skills “has come at the cost of legal research instruction”); Mills, supra note 7, at 346 (mentioning that there is insufficient time to address the deficiencies in writing skills, let alone address research skills); Seligmann, supra note 34, at 181 (indicating that it is difficult to give sufficient attention to both research instruction and writing instruction); see also Mersky, supra note 80, at 396 (discussing how the author felt “jealous and envious of the attention that legal writing receives in the typical law school curriculum”). Billie Jo Kaufman, Associate Dean for Library and Information Resources at Washington College of Law–American University, stated at the Thomson West Town Hall Meeting in 2007 that one of the reasons for the deficiencies in students’ research skills is that “there is an emphasis on legal writing rather than legal research, not necessarily a balance of the two.” Research Skills, supra note 3, at 5. Dean Kaufman went on to say, “Students think they know how to conduct research by simply completing the basic research and writing courses. They are wrong.” Id.

238. “[L]egal writing entered the expressway; legal research took the off ramp.” Dunn, supra note 54, at 56; see Hemmens, supra note 22, at 213 (indicating that one of the factors for the students’ declining research skills is the increased focus on the students’ writing skills).


240. See Sourcebook, supra note 69, at 75–78; Gallacher, Who Are Those Guys?, supra
appropriate student-faculty ratio. Additional research instructors require not only more financial resources, but physical resources such as more classrooms, more access to electronic resources (computers) or print resources (more than one copy of particular codes, reporters, secondary sources, or finding aids), or more access to equipment to tape web casts.

The fourth roadblock for law school administrators and faculty members is the pressures from students, heard primarily through course evaluations. “Research exercises from workbooks are nothing but busy work.” The research exercises did not relate to the projects that we were working on. “Why are we learning how to do research in print resources? Get with the times!” Whether law school faculty and administrators should base instruction decisions on student evaluations is beyond the scope of this article; however, administrators and faculty members should listen to what the students are saying; students’ input helps determine which methodologies are best in terms of effective teaching.

And finally, non-research and writing professors present roadblocks. Some non-research and writing professors may feel that research and writing topics

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note 66, at 161 n.19 (describing how students are also influenced by whether legal research is graded; if students receive a pass or fail grade, that “indicates that the class is easier than others, and therefore the subject will be easier to acquire”); Lynch, supra note 1, at 437 (indicating that pass or fail grades limit student incentives to do well in legal research and writing courses).

241. SOURCEBOOK, supra note 69, at 82, 89, 95, 100, 103, 106–07, 112 (discussing the suggested student/faculty ratio in six different staff models); see Hardy, supra note 22, at 223 (“Skills training[, like legal research instruction,] requires . . . a high faculty-student ratio.”).

242. Anecdotally, this comment is based on what fellow legal research and writing professors have told me about the comments that students wrote on the course evaluations, despite the fact that the professor explained the pedagogical reason for doing research instruction in that fashion.

243. See supra note 242.

244. See supra note 242; see also Keefe, supra note 2, at 119 (repeating students’ comments, “Why do I need print? I have a system, it’s called Google.”). In regards to learning how to use print resources, students “must understand that these exercises are a means to an end (understanding structure and search technique) and not necessarily an end in itself.” Id. at 125. Professor Teitcher stated that “[a]t best, students go through the motions of doing the book exercises . . . assign[ed] . . . waiting for the day when they never have to open a book again.” Teitcher, supra note 130, at 555–56.

245. See, e.g., Tracy L. McGaugh, Generation X in Law School: The Dying of the Light or the Dawn of a New Day?, 9 LEG. WRITING 119, 133-42 (2003) (discussing different teaching methods that professors can use to help Generation X students learn); Cohen, supra note 239, at 589 (“[K]nowing that students learn best in many different ways, we can begin to incorporate new techniques to teach legal research more successfully.”). Dean McGaugh stated, in regards to the Millennial Generation, that “[t]he disconnect between teacher learning styles and student learning styles is only going to become more pronounced if teachers shun technology.” McGaugh, supra note 245, at 143.
should be taught in research and writing classes and not incorporated across the curriculum; they may believe that the content of their courses is just that—theirs. For the road of research instruction to successfully navigate the entire curriculum, a commitment is needed from all faculty members to ensure that our students are competent researchers. Institutional factors that affect legal research and writing programs, and consequently affect legal research instruction, include the culture, mission, and history of the law school. Non-legal research and writing faculty members need to understand how and why research is being taught in a particular manner. Non-legal research and writing faculty members, who teach seminar or independent research project classes or supervise students writing their law review papers, need to understand what skills or competencies their students have at the end of their first-year legal research and writing curriculum. With this understanding, the non-legal research and writing faculty members need to examine how they can help to further develop and reinforce those skills in upper-level classes, as well as introduce and develop any of those skills that could not be covered in the research and writing curriculum. Non-research and writing professors should not assume that all the research instruction that students need was taught in the research and writing curriculum, which is why research instruction should continue across the curriculum.

IV. The Role of the Road of Research Instruction Across Legal Education—It Reinforces, Rejuvenates, and Refocuses Law Students’ Attention on Maintaining Competent Research Skills

Since the value of legal research becomes acute in the practice of law, faculty members [should] be expected to bring their substantive knowledge about research sources to bear in every course taught.  

246. For example, Roy Mersky once stated,  

Moreover, many of my colleagues who teach “real” first-year courses—torts, contracts, property, constitutional law—continue to view “skills” courses such as legal writing and legal research as distractions from the real work at hand. Worse yet, in their view, research and writing instructors don’t hide the ball. Mersky, supra note 80, at 399.

247. SOURCEBOOK, supra note 69, at 26–27 (discussing how important research instruction is in legal research and writing classes because of “the likelihood that [the students] may have little or no further research training in law school” beyond the first-year legal research and writing class); see, e.g., supra notes 230–38.

248. Donald J. Dunn, Why Legal Research Skills Declined, or When Two Rights Make a Wrong, in EXPERT VIEWS, supra note 6, at 19, 26.
There is no one way to teach research, but incorporating legal research instruction across the curriculum will only help to reinforce, refocus, and repeat the initial skills that the students learned in their first-year legal research and writing classes and set the students on the path towards research competency, while stressing the importance of ongoing research skills development beyond law school.

Continuing the road of research instruction across the curriculum will accomplish the following “R’s” of legal research:

249. Seligmann, supra note 34, at 201–02.

250. Many authors agree with the fact that legal research should continue throughout law students’ legal education. E.g., Camille Broussard, Models for Teaching Legal Research: Integrating Theory and Practice, in THE LAW LIBRARY 2004, SKILLS, STRATEGIES & SOLUTIONS 83, 90 (Practising L. Inst. 2003) (“We must teach, teach early and often, and teach again. We must teach the ‘right’ things . . . . [W]e must impart to students that learning research skills is a career long endeavor.”); Milles, supra note 114, at 16 (“How can we expect first-year law students to learn research in the first year when they have no opportunity to practice their research skills in any of their other classes and when they are thoroughly occupied with learning the basics of the substantive first-year curriculum?” And the author suggests that there should be “a more comprehensive course of ‘research across the curriculum,’ incorporated into a variety of upper-division courses.”); Pettinato, supra note 55, at 21 (“Law students should not simply be taught a few techniques and then turned loose on the library; instead they must learn the search process bit by bit, continually developing new skills.”).

Authors have been pointing out the lack of legal research instruction in the second and third years of law school since at least 1975. Cooper, supra note 6, at 14; Cohen, supra note 239, at 584; Cordon, supra note 3, at 46 (discussing how at Baylor Law School, “research courses . . . could not provide proper instruction in a significant percentage of these skills without relying on coverage in other courses that have little to do specifically with legal research. . . . [And] instructors should carefully evaluate how research courses could be adapted to take advantage of courses in more traditional types of curricula.”); Dunn, supra note 54, at 62 (“An appreciation of the value of legal research and skill in the use of legal sources also deserves to be inculcated into each student’s law school experience. . . . Legal research should pervade the law school curriculum in much the same ways as do legal analysis, legal writing, oral advocacy, and professional responsibility. It cannot be taught only as a discrete unit early in a student’s law school career and then be allowed to atrophy until it is needed again in practice.”); Howland & Lewis, supra note 14, at 389; Sadow & Beede, supra note 7, at 30; Woxland, supra note 6, at 460.

251. This is similar to how “[m]ore time spent on developing writing skills . . . would likely generate better results”; more time spent on developing research skills will generate better results. Gallacher, Who Are Those Guys?, supra note 66, at 194.

252. One author argued that a disadvantage to teaching research in doctrinal courses is that the exercise will still be law-focused instead of client-focused. Terrell, supra note 110, at 501.
Reinforcement, repetition, and revisiting leads to retention: Knowledge comes with experience. As James Milles stated, “[O]ne learns research by doing research.” Students learn by doing and learn from making mistakes. Repeating research instruction and requiring students to do research projects in other classes helps to reinforce the skills and strategies students learned in their first-year legal research and writing courses. In addition, allowing students to make mistakes within a “comfortable” environment (law school), one in which students can learn without severe consequences, helps to reinforce skills. Repetition is crucial for students to retain what they learned during the first year.

253. Edwards, supra note 15, at 31 (stating that “expos[ing] the student to a resource, an appreciation of the value of the work (and retention of how it is used) may be lost if not reinforced”). In addition, Professor Michael Murray and Professor Christy DeSancts, discuss that incorporating research and writing problems across the curriculum will not only reinforce the skills that the students learned in research and writing classes, but will also help students to master the concepts in their casebook courses. Michael D. Murray & Christy H. DeSancts, Legal Research and Writing Across the Curriculum: Problems and Exercises, at viii–ix (2009) (“In law school, students can master the concepts of legal method and the separate areas of study in the law better if they take on problems—research problems, writing problems, and other practice-orientated problems—in the course of their study of these areas of the law, and do not confine themselves solely to research and writing practice in the legal research, legal writing, or legal method course.”).

254. Seligmann, supra note 34, at 183 (indicating that a “confident researcher uses existing skills and knowledge about legal resources and applies them to the unknown area”).

255. Milles, supra note 114, at 16; see also Charles R. Calleros, Legal Method and Writing 170 (5th ed. 2006) (stating that “[e]ffective research skills are the product of long hours in the library, for which no primer on research techniques can substitute”).

256. Diamond, supra note 33, at 70.

257. Research “must be practiced and reinforced throughout the curriculum.” E.g., Simons, supra note 130, at 366 (“[S]tudents’ understanding of the structure of legal materials and authority and of the research process is built through successive layers of instruction, moving always from what the student already knows to the next conceptual level.”); see Milles, supra note 114, at 16 (questioning why students are not given the opportunity to practice what they have learned during their second and third years); Whisner & Vaughn, supra note 22, at 72 (“[A]ll of the education literature suggests that to develop a skill, a student must continually practice the skill and receive meaningful feedback.”), 76 (discussing how the research lectures presented in the second- or third-year classes, reinforced what the students learn in the first-year legal research and writing classes, “adding focus and sophistication”).

258. See Katcher, supra note 52, at 47 (discussing how practice allows students to “test” their skills and provides further opportunities for skills development); Harriet N. Katz, Evaluating the Skills Curriculum: Challenges and Opportunities for Law Schools, 59 Mercer L. Rev. 909, 917 (2008) (discussing skills generally).

259. Brandt, supra note 22, at 126 (suggesting several options to reinforce and refine the students’ research skills from the first year, including Advanced Legal Research classes or
Ripe for training: Students must be “ready to learn.” Students are not motivated to learn how to research until they do their first summer clerkship and realize the importance of the research skills they learned in their legal research and writing classes. The millennials are “just in time” learners; therefore, legal research instruction needs to be provided at the “time of need.”

Providing the research instruction when the students need it most will also help to reinforce the research instruction. For the first-year students, research instruction is needed when the first open-universe writing assignment is assigned, and the research instruction needs only to be basic.

subject-specific classes); Hemmens, supra note 22, at 213.

260. Gerdy, supra note 115, at 75–76 (discussing how “[a]dults learn best when they understand the importance of material they are learning and see that it is linked to performance that is expected of them in their social role”); see also Milles, supra note 114, at 16 (stating “that law students do not learn legal research in their first year” because they “have no conceptual understanding of law and no contextual basis for specific research skills”).

261. Gerdy, supra note 115, at 76 (indicating that “motivation comes from a belief that what they are learning is relevant and important to their lives—both short-term (in preparing for and succeeding in the current course) and long-term (in their future professions)”).

262. Berring & Heuvel, supra note 159, at 442; Carrick, supra note 134, at 70 (discussing how students are not motivated to learn how to be competent researchers until after the first clerkship); Whisner & Vaughn, supra note 22, at 75 (discussing their Labor Law and Employment Discrimination Law classes, in which the students realize, after their summer jobs, the importance of research skills).

263. Stephanie B. Goldberg, Beyond the Socratic Method, STUDENT LAW., Oct. 2007, at 19, 22, available at http://www.abanet.org/lsd/studentlawyer/oct07/goldberg.shtml (continuing on to say that the Millennials are “surrounded by information, much of which can be instantly accessed. They want to learn things when they have a compelling need for [the information] or, at least, understand why information is relevant before committing to learning it.”). The previous generation, Generation X, were also “just in time” learners. McGaugh, supra note 245, at 128. Dean McGaugh mentions that “[e]verything students learn in law school already lays the foundation for a lifetime of ‘just in time’ learning.” Id. at 136.

264. Potter, supra note 36, at 294. Examples of research “times of need” include the following: summer clerkships, law review projects and papers, internships, research assistantships with professors, and upper-level writing requirements. Sanderson, Point of Need Analysis, supra note 224, at 81. “Times of need” are points the students’ needs appear most urgent. Id. at 83. Research education at the “time of need” is meant to reinforce the research skills that the students obtained in the first-year. Id. This “time of need” or “point of need” training continues throughout an attorney’s career. See Eaton, supra note 155, at 48–50 (discussing “point of need” training that takes place at law firm libraries). “Times of need” occur at “point[s] where the students are better equipped to understand” legal research skills. Gallacher, Hitchhiker’s Guide, supra note 114, at 169–70.


266. “Trying to teach systematic research during the first year is trying to teach the wrong
Refocus and re-stress the importance of research skills: Law school administrators and faculty members need to refocus attention on the deficiencies in legal research skills. Yes, keep the focus on improving the students' writing skills; but also focus on research skills—remember that without research skills, there will be nothing to write or argue about.\(^{267}\)

Relate: Once students have taken the first-year legal research and writing classes, the students have experience with conducting legal research, and then they can draw on these learning experiences as they transition into the second- and third-year courses and summer clerkships.

Requiring independence: Students need to be the directors of their own information-seeking activities.\(^{268}\) Instead of looking for the exact answer that the professor hopes students will find, students should be conducting research in real-world settings, where there is not always an exact answer. During their first clerkships, students will be expected to handle research projects independently.\(^{269}\)

Curriculum Requirements: Classes such as Advanced Legal Research should be required in law school to ensure that the students have received sufficient research instruction and preparation for a research component on the bar exam.\(^{270}\)

Real-world context:\(^{271}\) Students need to transition from the prepackaged,
sorted facts of some of the legal research and writing assignments to "real world" research and problem solving. In legal research and writing classes, students are focusing on getting the assignment done, instead of thinking about how the outcome of the client’s case is the attorney’s responsibility, and the quality of the research could affect the client and the attorney. In the real world, there are no signposts for the attorneys to know whether they are on the right research trail.

In addition, real world attorneys need to know how to do non-legal research such as medical, business, statistical, historical, political, or economic research. Students need to learn about the resources attorneys are using.

- Resources in the real world: Unless law schools require students to take Advanced Legal Research courses or participate in internships, externships, or clinics, students will not be introduced to the resources that attorneys actually use in the real world; resources such as loose leafs, form books, treatises, continuing legal education materials, advanced database content, and interdisciplinary materials.

Incorporating research training across the curriculum will also signal the importance of legal research skills to the students. As Professor Gallacher stated, “Legal research is certainly too large a topic to be covered in its entirety as part of a first-year writing class, and there is a crucial role for upper-level research programs to play in all law schools.”

The Appendix that follows this Article includes a list of suggestions about how to incorporate research instruction across the curriculum in first-year law courses.

272. More and more assignments in research and writing classes are based off real world situations; however, given the nature of the classes, the students cannot do research, factual and legal, in the same manner as they would when they become attorneys. See supra notes 56–57, 170–72.

273. Diamond, supra note 33, at 89.

274. Partnership and Solutions, supra note 7, at 7. Ann Hemmens mentioned that students do not have the opportunity to work with legislative history or administrative law materials in their first-year legal research and writing classes. Hemmens, supra note 22, at 213.

275. See Diamond, supra note 33, at 69, 121–25 (discussing how second- and third-year students need to learn about practitioner research sources and others such as verdict reporters); see also Whisner & Vaughn, supra note 22, at 76 (discussing how some of the sources students learn about in their first-year legal research and writing classes, such as digests and statutes, “generally can be used for any subject”; however, students lack experience in working with sources that are specific to certain subjects).

276. Diamond, supra note 33, at 85 (explaining that incorporating research training across the curriculum would show students “that research is not a one size fits all process.”).

classes as well as second- and third-year classes. In first-year classes, non-
research and writing professors could simply talk about the sources cited in
cases from the casebooks or talk about the secondary sources—Restatements
and Model Rules, for example—which are important to the study of that
particular area of law. In second- and third-year classes, professors should
invite librarians to speak in their classes or develop separate one-credit
research classes for those areas of law that involve unique sources or for those
areas that students can earn certificates of concentration.

V. Conclusion

The road of research instruction must continue throughout the law school
curriculum.278 The issue is larger than the debate over whether first-year law
students should learn print or electronic research strategies.279 The issue is
larger than the debate about how law school libraries will look in the next five,
ten, or fifteen years.280 The focus should be on research instruction in general.
Each argument, written or oral, must be based on and grounded in the law.
Without the law, written documents and oral arguments are all “fluff.”
Without legal research, attorneys do not know the law and, consequently,
cannot solve the legal problems that they were hired to solve or cannot comply
with ethical duties.

“[W]e do research whenever we gather information to answer a question
that solves a problem.”281 Attorneys do research every day.282 “As in all other
areas of legal education, [legal research and writing skills are] a career-long

278. Dunn, supra note 54, at 62 (“Legal research should pervade the law school curriculum
in much the same ways as do legal analysis, legal writing, oral advocacy, and professional
responsibility.”).
279. See, e.g., BERRING & EDINGER, supra note 6, at 5–7; Bintliff, supra note 54, at 249–52
(discussing the debate over the change in research strategies from print to electronically based);
Leiter, supra note 4, at 24 (explaining that “there are some kinds of research that simply can’t
be performed on an iPhone, even if the sources can be accessed on one[,] and there are also
some kinds of research that don’t lend themselves exclusively to work in the library or on a
computer, but may require a bit of both.”); Steven R. Probst, Teaching Content, Not Containers,
L. LIBRARIANS IN THE NEW MILLENNIUM, Mar.–Apr. 2006, at 7, 7. Compare Milles, supra note
114, with Shear, supra note 145 (responding to Jim Milles). See generally Greenburg, supra
note 130 (surveying Chicago-area lawyers to determine whether print research instruction
should be abandoned).
280. See Probst, supra note 279, at 7 (discussing the importance of teaching content, and not
containers).
student enters a law library, or opens a print resource, or accesses a resource on the Internet, or
accesses databases on Lexis or Westlaw—the student is entering a world of research.
282. In fact, everyone does some sort of research every day. Id. at 10–11.
process.\textsuperscript{283} Given the changing landscape of legal libraries, legal research instruction must be taught across the student’s law school career, from the first year of law school in research and writing classes into second- and third-year classes to ensure that students have learned the fundamental research skills necessary to be competent attorneys. The road of research instruction must continue across the law school curriculum; in fact, attorneys should never leave the road of research instruction during their legal careers.\textsuperscript{284}

\begin{itemize}
  \item Mills, supra note 7, at 347.
  \item Brink, supra note 59, at 307 (Students must “become lifelong learners about research tools and processes.”); Broussard, supra note 250, at 90; see Danner, supra note 47, at 194 (discussing how developing and maintaining information literacy skills is necessary for lifelong learning); \textit{id.} at 197 (concluding with the importance of educating students to develop their information-seeking skills and to continue that development throughout their professional careers); Terrell, supra note 110, at 494 (“We all know that the process of legal education does not stop with law school graduation.”).
\end{itemize}
Suggestions on How to Map a Course for the Road of Research Instruction Across the Curriculum

First-Year Courses: 285

- Focus the research and writing assignments in the first-year legal research and writing classes on material covered in the first-year classes 286 to reinforce the learning of the black letter law, but also to keep students within the areas of law that they are studying.

- In the closed universe research and writing assignments, professors should not provide the students with the sources they should use. Instead professors can simply provide the students with a list of citations to the source in the universe and require that the students find the sources themselves.

- In courses that require the student to purchase Restatements or in which Restatements are discussed, 287 professors should discuss the details of the source: how Restatements are a secondary source, who publishes the Restatements, how courts use Restatements, and where the students can access the Restatements.

- Similarly, in criminal law courses, the professors should take a moment to explain Model Rules. 288 For example, they should discuss how Model Rules are a secondary source, unless adopted by the state’s legislature;

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285. Actually, the road of research instruction does not have to begin with the first year of law school. Professor Gallacher suggests that “law schools could partner with their home undergraduate and graduate institution [or local undergraduate institution, if the law school was a stand-alone entity] to offer writing, reading, and research courses that better prepare students in those institutions to learn lawyering skills in law school.” Gallacher, Who Are Those Guys?, supra note 66, at 196 (citations omitted). Additionally, pre-law advisors should stress that students need to take additional writing and research courses.

286. Cooper, supra note 6, at 16. One author, Carol Golden, suggests incorporating research into all the first-year doctrinal courses. Golden, supra note 7, at 38.

287. Students may be required to purchase Restatements for Torts or Contracts, for example. BERRING & EDINGER, supra note 6, at 12. For a general discussion of Restatements, see such research texts as BERRING & EDINGER, supra note 6, at 12–13, and MERSKY & DUNN, supra note 54, at 405–09.

288. For a general discussion of Model Rules, see MERSKY & DUNN, supra note 54, at 416–18; SLOAN, supra note 31, at 48 (discussing how model rules are similar to Restatements “in that they set out proposed rules, followed by commentary, research notes, and summaries of cases interpreting the rules”).
how courts use Model Rules, if the legislature has not adopted them; and where the students can find Model Rules.

- Also in criminal law, for example, if the professor does not have time to cover a certain crime, he or she could assign the students a short research project, in which the students could research the elements of the crime and provide the professor with the elements.289

- Non-legal research and writing professors could talk about the citations of the cases in students’ casebooks and the sources cited within the cases. By talking about which court decided the case and whether the case would be mandatory or persuasive authority, and by discussing the cited sources (whether they are primary or secondary sources; whether they are mandatory or persuasive authority; the type of support; and why the court cited the particular source290), the professors would be reinforcing the basic research concepts from law students’ first year.

These discussions would only take a couple of minutes, and they would reinforce what the students are learning in first-year legal research and writing classes.

- First-year professors could also assign hypothetical fact patterns and ask students to find the applicable case law (incorporating cases that do not appear in the casebook).291

Second- and Third-Year Courses:

- Law schools should require Advanced Legal Research classes, not only so students are exposed to sources that were not covered in first-year legal research and writing courses,292 but also to reinforce the research

289. This was one of the suggestions that was discussed after my presentation at Stetson’s Junior Faculty Forum for Florida Law Schools and Junior Faculty Skills Scholarship Forum for Law Professors, held at Stetson University College of Law on November 14–15, 2008. I would like to thank the group of professors (assigned to present in Classroom D) for their suggestions and insights on this article: Catherine Cameron, Stetson University College of Law; David Cleveland, Shepard Broad Law Center, Nova Southeastern University; Tamara Lawson, St. Thomas University School of Law; Charlene Luke, University of Florida Levin College of Law; Eang Ngov, Florida A&M University College of Law; Lee Schinasi, Dwayne O. Andreas School of Law, Barry University; and Andre Smith, Florida International University College of Law.

290. See Dunn, supra note 54, at 64.


292. E.g., Howland & Lewis, supra note 14, at 389 (identifying administrative law); Silecchia, supra note 54, at 211.
instruction from the first-year and possibly provide remedial instruction.  

- In courses that involve unique research sources, like international or tax law, the professors should do short presentations, or ask the law librarians or practitioners to do short presentations, on the sources and research strategies necessary in those specific areas of law. Professors should also assign short research projects so students may have an opportunity to work with the sources described.  

- If a law school has a concentration program, each student in the program should be required to take a one-credit research class that focuses on how to research the law and related materials within that concentration.

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293. Anecdotally, many Advanced Legal Research professors have discussed how “ALR” (Advanced Legal Research) classes are not Advanced Legal Research classes, but rather Another Legal Research class—a remedial research class. See Dunn, supra note 54, at 68 (calling research workshops “refreshers”).

294. In 1991, the late-Professor Roy M. Mersky of the University of Texas states that the librarians at the University of Texas Law Library began offering “one-credit courses in specialized research topics such as tax, bankruptcy, labor, and international law.” Roy M. Mersky, Teaching Legal Research, 2 SCRIBES J. LEG. WRITING 148, 149 (1991); see also Cooper, supra note 6, at 17, 26. See generally Cordon, supra note 3, at 49; Jean Davis et al., Perspectives on Teaching Foreign and International Legal Research, LEGAL REFERENCE SERVICES Q., vol. 19, nos. 3/4 (2001), at 55, 55.

295. See generally Whisner & Vaughn, supra note 22, at 72-74 (discussing the cooperative effort between a professor and a librarian in an employment discrimination class).

296. See Cooper, supra note 6, at 17 (advocating that professors assign more research and writing projects altogether). Writing assignments will require the students to apply their research skills. Edwards, supra note 15, at 32.

297. At Stetson, there are four concentration programs—advocacy, elder law, international law, and higher education law and policy.