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**Think [and Practice] Like a Lawyer:
Legal Research for the New Millennials**

Aliza B. Kaplan & Kathleen Darvil

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Aliza B. Kaplan* and Kathleen Darvil**

I. Introduction

Calls for law school reform have grown louder over the past thirty years.¹ Criticism of legal education has come from every quarter of the profession. Groups of dissatisfied lawyers, judges, and academics have argued that “most law school graduates lack the minimum competencies required to provide effective and responsible legal services;”² and

* Associate Professor of Legal Analysis & Writing, Lewis & Clark Law School. J.D., Northeastern University School of Law, B.A. The George Washington University. I am indebted to my former colleagues at Brooklyn Law School, Professors Elizabeth Fajans, Linda Feldman, Jayne Ressler, and Cynthia Godsoe, who provided their suggestions or comments on previous drafts of this article. I would also like to thank Brooklyn Law School students, Kristin Gallagher (2011) and Kristie LaSalle (2012) for their invaluable assistance. Thank you Guruji for your light, my parents for their encouragement, and Sean, Ezra, and our girls for their love.

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¹ See generally Roger C. Cramton & Barry B. Boyer, *A Proposed Program of Studies in Legal Education* (1973) [hereinafter *Cramton Report*]; ABA Sec. Leg. Educ. & Admis. to B., *Legal Education and Professional Development—An Educational Continuum, Report of The Task Force on Law Schools and the Profession: Narrowing the Gap* (ABA 1992) [hereinafter *MacCrate Report*]; Elizabeth Mertz, *The Language of Law School: Learning to Think Like a Lawyer* (Oxford U. Press 2007); William M. Sullivan et al., *Educating Lawyers: Preparation for the Practice of Law* (Jossey-Bass 2007) [hereinafter *Carnegie Report*]; Roy Stuckey et al., *Best Practices for Legal Education: A Vision and a Road Map* (Clinical Leg. Educ. Assn. 2007) [hereinafter *Best Practices*].

² *Best Practices*, *supra* n. 1, at 1; see also Steven C. Bennett, *When Will Law School Change?* 89 Neb. L. Rev. 87, 90 (2010) (“Law schools primarily produce one thing: graduates who—for the most part—plan to practice law in one or more fields, in connection with one or more institutions, for some period of time. Increasingly, critics and commentators, inside and outside academia, have suggested that law schools can perform that central function better.”).

numerous studies reveal that new lawyers lack critical practical skills.³ This verdict finds support in the MacCrate Report⁴ and the Carnegie Report,⁵ both of which offered valuable suggestions for curriculum reform. Despite this criticism, for the most part, legal educators and law schools have resisted change.⁶ Meanwhile, law school tuition has skyrocketed.⁷ Law students, who are graduating with crippling debt and facing a shrinking job market, are unprepared to practice law in the global marketplace.⁸ There is strong support in favor of an overhaul of the legal education system.⁹

The problem runs deeper than law school curriculum. Teaching methods also need updating to meet the need of the new breed of law student. Generation Y, or Millennials,¹⁰ are the first students raised with technology as a major component in their lives.¹¹ Some have described these students as special, sheltered, confident, team-oriented, conventional, pressured, and achieving.¹² They are also ambitious, demanding, and they question everything.¹³ Old teaching techniques do not work for Millennials. These law students have a new set of skills and priorities, and they demand a new approach to teaching, career planning, grading, and feedback. Rather than a teacher-centered approach to education,

³ See generally Gene Koo, *New Skills, New Learning: Legal Education and the Promise of New Technology* (Berkman Ctr. for Internet & Socy., Harv. L. Sch., Pubs. No. 2007-4, 2007) (available at <http://ssrn.com/abstract=976646>) (discussing a study by Berkman Fellow at Harvard Law School in partnership with LexisNexis that found that most new lawyers lack critical practice skills, including adequate legal research skills).

⁴ *MacCrate Report*, *supra* n. 1.

⁵ *Carnegie Report*, *supra* n. 1, at 7.

⁶ See e.g. Amy Vorenberg & Margaret Sova McCabe, *Practice Writing: Responding to the Needs of the Bench and Bar in First-Year Writing Programs*, 2 *Phoenix L. Rev.* 1, 3 (2009) (explaining that legal writing programs have made little substantive changes over the past twenty-five years).

⁷ See Katy Hopkins, *Law School Tuition Climbs Despite Legal Recession*, U.S. News & World Rpt. (Sept. 9, 2010) (available at <http://articles.bestlawfirms.usnews.com/articles/law/2010/09/09/rising-demand-rising-tuition.html>); Ameet Sachdev, *Law School Tuition Hike Sparks Talk of Bubble*, *Chi. Trib.* (Apr. 27, 2010).

⁸ David I.C. Thomson, *Law School 2.0: Legal Education for a Digital Age* vii (Matthew Bender & Co., Inc. 2009); see also Hopkins, *supra* n. 7; Sachdev, *supra* n. 7.

⁹ See Katherine Mangan, *Law Schools Could Take a Hint From Medical Schools on Curriculum Reform, Experts Advise*, *Chron. Higher Educ.* (Apr. 27, 2010); see e.g. Thomson, *supra* n. 8.

¹⁰ Generation Y, also known as the Millennial Generation (or Millennials), were born between 1982 and the early 2000s. Neil Howe & William Strauss, *Millennials Rising: The Next Great Generation* 3-7 (Vintage Bks. 2000); see also Reynol Junco & Jeanna Mastrodicasa, *Connecting to the Net.Generation: What Higher Education Professionals Need to Know about Today's Students* 6 (NASPA, Inc. 2007).

¹¹ See generally Eliza Krigman, *Millennials Defined by Technology Use*, *Nat'l J.* (Feb. 25, 2010) (available at http://nationaljournal.com/njonline/no_20100225_3691.php).

¹² Howe & Strauss, *supra* n. 10, at 6-16; Tricia Kastings, *Commentary: The Millennial Law Student Generation*, 186 *N.J. L.J.* 265, 265 (2006) (describing Millennials as "confident" as they believe in themselves, "conventional" as they accept social rules, "sheltered" as they have had highly structured lives, "team-oriented" as they like to work together, "achieving" as they have high expectations for themselves, and "pressured" as much is expected from them).

¹³ Howe & Strauss, *supra* n. 10, at 6-16.

Millennials require a learning-centered approach in which the student, not the teacher, is the focus.¹⁴

The need for curriculum modifications and instructional strategies geared for technology-savvy students combined with the current economic downturn and demands for change from legal professionals provide law schools with the opportunity to transform legal education. One area ripe for significant change is how our law schools teach legal research. Legal professionals in particular are critical of new lawyers' research skills; they say that these new lawyers are unprepared to conduct legal research and that their research skills are unsophisticated.¹⁵ Law employers complain that many students and new practitioners overuse LexisNexis and Westlaw, cannot provide preliminary answers in a short time frame, are ignorant of how to research statutes and regulations, are uncertain when to stop researching, and have no understanding of how to conduct cost-effective research.¹⁶ Today's legal research instruction neither trains students for the complexities of practitioner research nor reinforces good research habits and skills. Research instruction is generally mandated only in the first year of law school,¹⁷ which is insufficient to develop the skills necessary for legal practice. It also sends the message that research is not an important skill. Moreover, many legal writing professors¹⁸ who teach research do not have expertise in legal

¹⁴ See David Whetten, *Principles of Effective Course Design: What I Wish I Had Known about Learning-Centered Teaching 30 Years Ago*, 31 J. Mgt. Educ. 339, 342 (2007).

¹⁵ See Thomson West, *White Paper: Research Skills for Lawyers and Law Students 2-3* (2007) [hereinafter *Research Skills for Lawyers and Law Students*] (available at http://west.thomson.com/pdf/librarian/Legal_Research_white_paper.pdf) ("First year associates are ineffective because they generally start with an online keyword search, racking up unnecessary billings and online charges, while not understanding the context of the results they retrieved.")

¹⁶ Leah Wortham, *The Lawyering Process: My Thanks For the Book and the Movie*, 10 Clin. L. Rev. 399, 439 (2003).

¹⁷ The American Bar Association does not mandate a specific curriculum for first-year law students. See ABA Sec. Leg. Educ. & Admis. to B., *Standards and Rules of Procedures for Approval of Law Schools* § 302, 21 (2009-2010 ed., ABA 2009) [hereinafter *ABA Standards and Rules*] (Section 302(a) (1) requires only the study of "substantive law" that will lead to "effective and responsible practice in the legal profession."). However, most law schools have their own mandatory first-year curricula that include Civil Procedure, Contracts, Property, Torts, Legal Research and Legal Writing, and usually Constitutional Law and Criminal Law, too. See e.g. Brooklyn Law School, *First-Year Program*, www.brooklaw.edu/academics/curriculum/firstyearprogram.aspx (accessed Mar. 14, 2011); Columbia Law School, *First-Year Courses*, http://www.law.columbia.edu/jd_applicants/curriculum/11 (accessed Mar. 14, 2011); Benjamin N. Cardozo School of Law, *First Year Curriculum*, <http://www.cardozo.yu.edu/MemberContentDisplay.aspx?ccmd=ContentDisplay&ucmd=UserDisplay&userid=10354&contentid=3848> (accessed Mar. 14, 2011).

¹⁸ In this article we will be using the terms professor and instructor interchangeably when discussing legal research teachers. Due to some of the issues noted, those who teach legal research and writing hold a variety of titles.

At forty schools we are called "professor" (recognizing gradation from assistant to associate to full). At forty-seven school[s] we are called "professor of legal writing." "Clinical professor" is used at seventeen schools. Apart from these titles with the magic word "professor" in them, we have twenty-five schools that use the title "instructor" and seventeen that use "lecturer." An additional thirty-two schools marked the ever-present survey response "other," which includes assistant deans and visitors.

The Legal Writing Institute: Celebrating 25 of Teaching & Scholarship, A Symposium of the Mercer Law Review, 61 Mercer L. Rev. 803, 829-30 (2009) (discussing the results of a 2008 survey of legal research and writing programs).

research,¹⁹ which would not be the case with any other specialized subject in most law schools. In order to best prepare our students to practice law, legal research instruction should be integrated throughout the law school curriculum, taught by those with the appropriate level of expertise, and should incorporate the resources and technology used by practitioners. Finally, it should take into account the cost of conducting research and include constantly increasing and changing online research tools and resources.

In part II of this article we discuss the criticism of today's new attorneys' research skills. Specifically, we explain the longstanding perception, which numerous studies confirm, that research skills of today's new attorneys are deficient. For example, new attorneys are unprepared to do cost-effective research; are unfamiliar with the numerous finding tools, secondary sources, and free resources that exist; and are unable to think conceptually when researching. We also offer an explanation as to why new associates are unable to research proficiently.

Part III focuses on how law schools teach legal research and why the current educational model does not teach students skills critical to their practicing law. In addition, we discuss the results of a study we conducted at Brooklyn Law School to determine the research habits of our own students. The results of the study confirmed our criticisms of the current regime of legal research instruction. It also showed that most students wish to be more prepared researchers when entering the job market.

Part IV highlights several recommendations for legal education reform including those in the MacCrate and Carnegie Reports, which both suggest that incorporating more practical skills, such as legal research, into the law school curriculum is necessary to better prepare students to practice law. Following up on these recommendations and based on our own experience, we propose a number of specific ways to improve upon and change the way legal research is currently taught. Specifically, we recommend that legal research instruction should use 1) multimedia technologies, 2) exploratory and collaborative strategies, 3) relevant subject matters, 4) and cost-effective tools. It should be integrated throughout the curriculum and taught by experts, which would convey its importance and assure adequate training. Making some timely and necessary changes to legal research instruction will integrate more practical skills into the law school curriculum and help us better prepare our Millennial students to be skilled practicing lawyers.

¹⁹ Duncan Alford, *The Development of the Skills Curriculum in Law Schools: Lessons for Directors of Academic Law Libraries*, 28 Leg. Ref. Servs. Q. 301, 306–09, 311 (No. 3, 2009) (stating that writing professors are infrequently research experts).

II. Criticism of New Attorneys' Skills

Over the years, the criticism of legal education has been consistent and clear from legal professionals, who complain that new attorneys do not write well, have poor legal research skills, and are unprepared to practice law.²⁰ In today's legal market, law firm clients are less willing to pay the firm's high costs, including in part those costs to cover the training of new attorneys. So it is more important than ever for new attorneys to already possess essential lawyering skills.²¹ One commentator recently explained,

As the profession has grown in size, the number of very large law firms expanded, and the use of contract lawyers, outsourcing and other cost-cutting measures has intruded. Over time, the legal profession has increasingly demanded change in the academy—not to become more theoretical, inter-disciplinary and divorced from the “real world,” but to focus more on lawyering, professionalism and inculcating values.²²

Yet most law schools have not budged, and practitioners continue to lament that recent graduates are lacking in practical skills.²³ Specifically, they believe that new attorneys are unable to perform cost-effective research, are unable to think conceptually when researching, and are unable to use print and online sources interchangeably.²⁴ They complain

20 See generally Vorenberg & McCabe, *supra* n. 6; Molly Warner Lien, *Breach of Trust: Legal Education's Failure to Prepare Students for the Practice of Law*, 1 J. ALWD 118 (2002); Scott P. Stolley, *The Corruption of Legal Research* 2, <http://terrenceberres.com/sto-cor.pdf> (accessed Mar. 14, 2011); Patrick Meyer, *Law Firm Legal Research Requirements for New Attorneys*, 101 Law Lib. J. 297, 321 (2009).

21 From 2004 to 2008, the legal field grew less than one percent on average (and the same growth rate is predicted until 2016). Fully one-third of U.S. law school graduates will likely not find employment as attorneys. Mark Greenbaum, *No More Room at the Bench*, L.A. Times (Jan. 8, 2010) (available at <http://articles.latimes.com/2010/jan/08/opinion/la-oe-greenbaum8-2010jan08>); see also Gina Passarella, *Post Recession Law Firms: A New Caste System Emerges*, Legal Intelligencer (Oct. 6, 2010) (available at http://www.law.com/jsp/article.jsp?id=1202472939044&PostRecession_Law_Firms_A_New_Caste_System_Emerges).

In particular, they have begun to insist that junior lawyers at law firms add value to the project teams on which they are staffed, and in some cases have insisted that “grunt” legal work be outsourced to lower-cost service providers. The inability of law firms to absorb large quantities of law school graduates, to pay them handsomely for novice work, and to return contributions to school endowments could dramatically affect the economics of law school administration.

Bennett, *supra* n. 2, at 109–10.

22 Bennett, *supra* n. 2, at 108 (citing *Carnegie Report*, *supra* n. 1, at 7).

23 See Vorenberg & McCabe, *supra* n. 6 at 9–22 (describing the authors' survey that asked judges and practitioners to rate lawyers' research and writing skills); see also Meyer, *supra* n. 20, at 312–14; see generally Jill L.K. Brooks, *Great Expectations: New Associates Research Skills from Law School to Law Firm*, 28 Legal Ref. Serv. Q. 291 (No. 3/4, 2009).

24 See *Research Skills for Lawyers and Law Students*, *supra* n. 15, at 2–3; Meyer, *supra* n. 20, at 303; Stolley, *supra* n. 20, at 6–7; Barbara Bintliff, *Context and Legal Research*, 99 Law Lib. J. 249, 259–60 (2007) (arguing that the shift from print-based research to electronic research fundamentally alters the way lawyers conduct research because it rids us of law's structure and legal context); see also Chief Justice John G. Roberts, Jr., *Dwight D. Opperman Lecture* (Drake U. L. Sch., Des Moines, Iowa, Oct. 2, 2008), in 57 Drake L. Rev. 1 (2008).

that new lawyers do not know what questions to ask when given a research assignment, that they cling to buzzwords for online searching, and that they have no idea about which databases are appropriate to search or what to do with the search results.²⁵ They also criticize new associates²⁶ for not evaluating the cost of a search in terms of both time and money.²⁷ For example, practitioners report that in order to understand a legal issue, new attorneys conduct keyword searches in expensive case-law databases rather than identify relevant treatises or practice aids.²⁸ Law firms argue that their new hires need to know when and why they use a particular source in a particular format²⁹ and that they need to be able to evaluate the cost of a search in terms of both time and money before they begin the research process.³⁰ These deficiencies relate to and compound each other. If an attorney does not understand the big picture surrounding a legal issue, she will waste time and money researching that issue and will miss analogous concepts.³¹ If a lawyer is uncomfortable using either print or online sources, she will not use the proper tools to research an issue quickly and competently.³²

Legal employers have good reason to criticize. Several recent studies highlight new attorneys' deficiencies in conducting research, including a 2006–2007 Westlaw study that compared new associates' research skills with those of senior associates.³³ The study found that new associates' lack of research skills is an unnecessary expense for law firms and their clients.³⁴ The law firms surveyed reported that partners typically write off

25 Meyer, *supra* n. 20, at 303.

26 See generally Warner Lien, *supra* n. 20; Stolley, *supra* n. 20; Meyer, *supra* n. 20.

27 Stolley, *supra* n. 20, at 8.

28 *Id.*

29 Meyer, *supra* n. 20, at 304; see also *MacCrate Report*, *supra* n. 1, at 157–63.

30 *Id.* at 312.

31 Stolley, *supra* n. 20, at 6–7; Bintliff, *supra* n. 24 at 258 (“Effective legal research starts within a sophisticated context of background information and knowledge.”).

32 See Thomson West, *White Paper: Partnerships and Solutions for Preparing Job Ready Attorneys 4*, west.thomson.com/support/librarian/event/AALLwhitepaper.pdf (July 2008) [hereinafter *Partnerships and Solutions*]; see generally Stolley, *supra* n. 20, passim.

33 See *Research Skills for Lawyers and Law Students*, *supra* n. 15, at 2.

34 See *id.* at 7; *Partnerships and Solutions*, *supra* n. 32, at 6. In 2006–07, Thomson West conducted a study comparing new associates' research skills with those of senior associates. *Research Skills for Lawyers and Law Students*, *supra* n. 15, at 2. After receiving positive feedback from this initial report, West conducted another study the following year. See *Partnerships and Solutions*, *supra* n. 32. This second report compared how law firms expect new associates to conduct research with how new associates actually conduct research. The findings of the second study and report reinforced the findings of the first in that the second report confirmed that new associates are generally not able to effectively and efficiently frame a legal issue and use all the resources available to them. *Id.* at 4 (listing the largest gap in the skill set new associates should possess); see also Meyer, *supra* n. 20, at 301. In 2007, Meyer surveyed law firm librarians to ascertain the research needs of law firms. He surveyed 162 law librarians, who worked for firms ranging in size from 1 to 25 to over 200 attorneys. *Id.* at 311. According to these librarians, the most important research task that entry-level attorneys are required to perform is cost-effective research.

half to all of new associates' research costs because new attorneys fail to perform cost-effective multimedia research.³⁵ With new associates spending forty-five percent of their time in their first year performing research and forty percent of their time performing research in their second and third years, writing off half to all of those expenses is costly.³⁶ Thus, it comes as no surprise that a 2007 survey found that 84.8% of law firm librarians ranked cost-effective research as the most important research task.³⁷ The law firm librarians surveyed also complained that new associates are unfamiliar with the tools of legal research. Specifically, law firm librarians stated that new hires do not know the difference between regulations and statutes, and that they "don't have a clue about indexes, digests, encyclopedias, or case table volumes in hard copy."³⁸ After reviewing the results of its own study as well as several others, the survey concluded that new attorneys must develop more integrated print and online legal research skills, including the use of secondary sources and finding aids.³⁹ In 2009, a law firm librarian's published a survey polled attorneys and law firm librarians on the skills new hires should possess and how law schools and law firms should assist new hires in acquiring those skills.⁴⁰ These findings were similar to those of both preceding surveys. The attorneys surveyed stated that new associates need not only know about secondary sources like legal encyclopedias and American Law Reports annotations, but also how useful these sources are in practice.⁴¹ The attorneys and law firm librarians also stated that the new hires need to know how to search efficiently and effectively, using Boolean search logic and Westlaw Key numbers to make the most of their searches.⁴² In all these studies, the lawyers and law firm librarians surveyed express unequivocally that new attorneys' inability to perform competent and quality research unnecessarily wastes both time and money.

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Id. at 311 tbl. 1. The librarians surveyed stated that most new associates do not know how to perform cost-effective research, do not use secondary sources, and do not know how and when to use a print resource. *Id.* at 312–14, 319–20; *see also generally* Sanford N. Greenberg, *Legal Research Training: Preparing Students for a Rapidly Changing Research Environment*, 13 *Leg. Writing* 241 (2007). Greenberg's 2005 study surveyed Chicago-area lawyers regarding their legal research methods in the hopes of better preparing law students to enter the workforce. *Id.* at 241. The survey found that lawyers are dissatisfied with the way new attorneys are "overly eager to jump online before using print resources." *Id.* at 242; *see also* Stolley, *supra* n. 20, at 8; *see Research Skills for Lawyers and Law Students, supra* n. 15, at 2; Meyer, *supra* n. 20, at 312.

35 *Research Skills for Lawyers and Law Students, supra* n. 15, at 2.

36 *Id.*

37 Meyer, *supra* n. 20, at 311.

38 *Id.* at 303.

39 *Id.* at 307.

40 *See generally* Brooks, *supra* n. 23.

41 *Id.* at 293.

42 *Id.* at 295.

As these studies indicate, attorneys need to be familiar with a broad range of legal research tools in order to perform cost-effective, quality research.⁴³ They need to know, for example, that a treatise will provide them with a broad overview of an issue, identify the controlling authority for an issue, and highlight related legal issues.⁴⁴ They also need to understand that not all secondary-source material is available electronically.⁴⁵ New attorneys need to know that a statute's annotations identify relevant cases and secondary sources.⁴⁶ Recent graduates need to be comfortable using secondary sources and finding aids because these tools provide context: they help attorneys see analogous concepts and broader themes.⁴⁷ Because the law is concept-oriented, being able to draw comparisons between legal concepts is essential. A researcher needs to understand an issue's broad implications in order to thoroughly and competently research that issue.

The inability of new attorneys to see analogous concepts when conducting research is due in large part to the shift from print-based research to electronic research.⁴⁸ One recent article explains that this shift created a new "legal paradigm"⁴⁹ because the sources of law are no longer finite and structured but are now almost limitless and unorganized. Traditional print-based research imposed a structured hierarchy on the law⁵⁰ that allowed researchers to determine the legal context surrounding an issue and to draw comparisons to other legal principles.⁵¹ Electronic resources have dismantled that structure because each of the myriad resources organizes and retrieves content in its own way.⁵² Consequently,

43 *Partnerships and Solutions*, *supra* n. 32, at 4; *see also* Meyer, *supra* n. 20, at 311–12; Stolley, *supra* n. 20, at 11–12.

44 Stolley, *supra* n. 20, at 7; Bintliff, *supra* n. 24, at 258.

45 Meyer, *supra* n. 20, at 319–20.

46 Bintliff, *supra* n. 24, at 261.

47 *Id.* at 258, 303; Stolley, *supra* n. 20, at 5–6.

48 *See id.* at 258–59.

[The majority of the resources used] (digests, statutes, regulations, treatises) consist[] of information assembled by judges, legislators, attorneys, regulators, law professors—legal professionals all—who work in a shared context gained through education and practice in the prevailing paradigm. Indexes, tables of contents, chapters, and sections all give visible and accessible structure to print resources. Shared context allowed these professionals to communicate their conclusions. And it allowed legal researchers to investigate and experiment, to find and use information, within the paradigm defined by legal professionals.

Id.

49 *Id.*

50 *Id.* at 251 ("West's comprehensive research structure also provided a shared context for legal research and analysis and, by extension, for the law itself. Attorneys, professors, and law students all used the same tools as springboards for research. . . . The legal research process was carried out in a context that allowed for effective communication as arguments were based on the same types of authorities, generally found in the same way.")

51 *Id.* at 251, 258; Stolley, *supra* n. 20, at 11.

52 Bintliff, *supra* n. 24, at 259.

the shift from print-based research to electronic research has changed the way research is performed and how research findings are interpreted.⁵³

This shift has also affected the way legal research is taught.⁵⁴ Because legal research instruction focuses on teaching how to use the two main electronic legal research platforms, Westlaw and Lexis, rather than on how to understand the structure of law, new lawyers do not understand how to research the law conceptually. The danger in all of this is that in their search to find the “perfect” case, new attorneys either fail to retrieve or overlook key authorities and therefore miss the fundamental principles governing the issue.

To properly prepare law school graduates for today’s legal marketplace, research instruction needs to be revamped. Emphasis should be placed on researching within law’s hierarchy, using a broad range of tools, regardless of whether that tool is available online or in print. Cost-effective research strategies should be taught to students, stressing the utility of popular secondary sources and other efficient search strategies and techniques. In order for new attorneys to be competent, competitive, and an asset to their employers, law schools should seek out the advice of practitioners and law firm librarians in the development of the legal research curriculum.

III. Teaching Legal Research

Law schools famously teach students to “think like a lawyer” but not actually how to “practice like a lawyer.”⁵⁵ In the area of legal research, law school graduates often lack a comprehensive understanding of the research process. They lack the skills to analyze a client’s problem, are unfamiliar with many necessary research tools and resources, and do not know how to create a research plan.⁵⁶ As a result, they are often unable to perform the necessary research required of them in the workplace. Law schools expect firms and other employers to train their graduates to write, to do research, and to be practitioners. Due in part to hard economic times and high entry-level-associate salaries, many law firms are less interested in playing this role and are frustrated with new lawyers’ lack of training and skills.⁵⁷ Other law firms have been forced to implement

53 *Id.* at 251–52, 257.

54 *See infra* pt. III(A) (How We Teach Legal Research).

55 *Best Practices, supra* n. 1, at 5 (“[M]ost law schools are not committed to preparing students for [law] practice.”).

56 *See infra* pt. III(C) (Brooklyn Law School Survey).

57 *Id.*

training boot camps for new associates or different salary structures for less practice-ready attorneys. This reflects poorly on both the new attorneys and their law schools. There is no question that making some timely changes to legal research instruction would be a win–win for students, law schools, and employers.

A. How We Teach Legal Research

Whereas the importance of legal research is often stressed, most law schools are not properly training students to perform this essential lawyering task. Law schools have not made significant advances to their research programs to keep up with the changes in technology or the characteristics of the Millennials. Among other reasons, the lack of resources devoted to legal research and the stagnancy of legal research programs have made legal research one of the skills critiqued by those who debate the importance of lawyering skills in legal education⁵⁸ and legal practitioners and employers.⁵⁹ Nonelective legal research training is for the most part limited to the first year of law school and is often taught by a legal writing professor or by the representative of an information vendor (or by a combination of the two).⁶⁰ Using this model, writing professors are required to cover topics such as “introduction to the law and the common law system, sources of the law, the court system, analyzing legal authority, legal method, briefing cases . . . writing legal memoranda, organizing legal discussions, constructing effective paragraphs . . . formatting appellate briefs, advocacy, and oral argument.”⁶¹ Writing professors provide feedback to students with detailed written comments and in individual conferences. After all that, they must also squeeze in legal research instruction. As a result, legal research cannot be taught in

58 Susan P. Liemer & Hollee S. Temple, *Did Your Legal Writing Professor Go to Harvard?: The Credentials of Legal Writing Faculty at Hiring Time*, 46 U. Louisville L. Rev. 383, 385 (2008) (“[I]t is no secret that most law school faculties in the United States have well-defined hierarchies and that legal [research and] writing professors often are relegated to low positions within those hierarchies.” (internal citations omitted)); see also Kent D. Syverud, *The Caste System and Best Practices in Legal Education*, 1 J. ALWD 12, 14 (2001) (comparing the hierarchies in law faculties to the traditional caste system in India). Along with a lack of tenure or long-term contract status, legal research and writing faculty often have a “lack of job security that accompanies tenure and exclusion of participation in faculty governance, as well as petty indignities such as inferior titles and physical conditions.” John A. Lynch, Jr., *Teaching Legal Writing After A Thirty-Year Respite: No Country for Old Men?* 38 Cap. U. L. Rev. 1, 5 (2009).

59 *Research Skills for Lawyers and Law Students*, *supra* n. 15, at 7.

60 Writing instructors are not always experts in teaching legal research, Alford, *supra* n. 19, at 306–09, 311 (stating that writing professors are infrequently research experts), and vendor representatives instruct students on the basics of Westlaw and LexisNexis while often pushing their product. See generally Shawn G. Nevers, *Candy, Points, and Highlighters: Why Librarians, Not Vendors, Should Teach CALR to First-Year Students*, 99 Law Lib. J. 757 (2007).

61 Roy M. Mersky, *Legal Research Versus Legal Writing Within the Law School Curriculum*, 99 Law Lib. J. 395, 398 (2007). These courses are already not given adequate credit hours and class time to do all of this because most legal writing and research courses teach all of this in a two-credit course each semester. *Id.*

depth at the only point in law school where it is required. Most first-year research curricula introduce students to basic electronic legal research instruction (usually limited to Westlaw and LexisNexis) and a few print materials. Their focus is teaching a few primary and secondary sources, finding tools, citators, and mastering citation form. These courses are generally case-law centered and do not cover any public law, foreign law, or nonlegal sources.⁶² Even at schools where the first-year curriculum has been updated, teaching legal research is often undervalued.⁶³ In some instances, it has been marginalized as first-year legal writing courses have transformed into first-year “lawyering skills” courses. These courses cover additional subject areas such as negotiation, interviewing, and client counseling. Many of these courses are taught without increased credits or class time. Furthermore, at many law schools, research skills are neither respected⁶⁴ nor incorporated across the curriculum in either the first year of law school or in upper-level courses.⁶⁵ Unfortunately, substantive-law professors often have no interest in incorporating research instruction into their courses.⁶⁶ Therefore, students get in-depth research instruction only when they choose to take an advanced legal research course taught by librarians.⁶⁷

In addition to these law school curricula limitations, students today arrive in law school with a misplaced confidence in their research skills.⁶⁸ They believe that the skills necessary to conduct a Google search are the

62 Often with the help of law librarians, Brooklyn Law School writing professors provide this type of research instruction in the first year. See Carrie W. Teitcher, *Rebooting the Approach to Teaching Legal Research: Embracing the Computer Age*, 99 *Law Lib. J.* 555, 556 n. 7 (2007).

63 Robert C. Berring, *A Sort of Response: Brutal Non-Choices*, 4 *Persps.* 81, 81 (No. 3 1996) (explaining that creating good research programs is difficult due to lack of faculty support).

64 Bennett, *supra* n. 2, at 105 (quoting Comments on the Report of the ABA Council L. Educ. & Admis. B., Spec. Comm. Sec. Positions, <http://www.abanet.org/legaled/committees/subcomm.html> (July 21, 2008) (noting that many law school faculty believe that practice-oriented courses are of “secondary intellectual value and importance”).

65 See Sarah E. Valentine, *Legal Research as a Fundamental Skill: A Lifeboat for Students and Law Schools*, 39 *U. Balt. L. Rev.* 173, 198–204 (2010) (discussing the numerous reasons why most law schools “fail to provide the necessary course coverage or to support the legal analysis skills and doctrine taught in other courses”).

66 “[T]hey may believe that the content of their courses is just that—theirs.” Brooke J. Bowman, *Researching Across the Curriculum: The Road Must Continue Beyond the First Year*, 61 *Okla. L. Rev.* 503, 549 (2008). Or they may believe that a substantive-law course is more important than a skills course. However, for our students who go on to practice law, they must be taught that the law and lawyering skills are both necessary to be a competent and ethical attorney. “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,” Donald J. Dunn, *Why Legal Research Skills Declined, or When Two Rights Make a Wrong*, in *Expert Views on Improving the Quality of Legal Research Education in the United States* 19, 26 (West Publ'g Co. 1992), or work with research instructions and librarians to do this.

67 See Ann Hemens, *Advanced Legal Research Courses: A Survey of ABA-Accredited Law Schools*, 94 *Law Lib. J.* 209, 223 (2002).

68 See Valentine, *supra* n. 65, at 189–90 (explaining that “[t]oday’s students arrive at law school often bereft of any legal skills except the ability to google,” yet they believe that these skills translate to conducting legal research) (internal quotations omitted); see also *infra* pt. V(A) (The Millennials).

same skills needed to conduct thorough and accurate legal research.⁶⁹ They do not understand that legal research is not solely task-oriented or answer-oriented. Legal research is a complex process that involves strategizing and designing an effective research plan, learning about the topic or issues involved, considering different sources and their hierarchy, and working meticulously and patiently.⁷⁰ Today's Millennials want fast answers and expect that they can just "plug in a couple of words with a connector or within quotation marks"⁷¹ and they will get everything they need. Because of these attitudes and the lack of interest and commitment by law schools to truly teach students legal research, it is no wonder that law students' and graduates' research skills are inadequate.

B. Law Students' Research Skills: What's Missing?

Law firms, judges, and practitioners are dissatisfied with the way new attorneys conduct research.⁷² The current state of legal research instruction fails to train students to adequately research the law. Because of the limited amount of time devoted to teaching legal research and the superficial nature of that instruction, law students graduate and fail to perform at the level required of them by their employers. In order for law schools to fulfill their obligations to students, a fundamental change needs to be made in the way legal research is taught.⁷³ Law students must be taught how to research in a cost-effective manner, with a variety of tools and in a variety of formats.⁷⁴ They must also be taught how to research a problem conceptually within an ever-changing "legal paradigm."⁷⁵ If taught properly how to research, students will be better prepared to enter the legal profession and will be more valuable to their clients and employers.

69 "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 [legal] research strategies such as, using indices, consulting table of contents, and starting with general terms and working to more specific terms." Bowman, *supra* n. 66, at 529.

70 "[L]egal research will be unlike any research [most students] have previously done because legal research requires [them] to use legal analysis. This analysis will tell [them] which issues to research and how to use the sources [they] find to solve the client's problem. Without being able to do legal analysis, [they] may be able to perform the mechanical functions of research, but [they] will not be able to understand the results of the research." Suzanne Rowe, *Legal Research, Legal Writing, and Legal Analysis: Putting Law School into Practice*, 29 Stetson L. Rev. 1193, 1197-98 (2000).

71 See *infra* pt. III(A) (How We Teach Legal Research); see also Teitcher, *supra* n. 62, at 568-69.

72 See *supra* n. 20, and accompanying text; see generally *supra* pt. II.

73 See Valentine, *supra* n. 65, at 194-99.

74 See Meyer, *supra* n. 20, at 307.

75 Professor Bintliff's discussion of the shift from print-based research to electronic research is discussed above. See *supra* pt. II (Criticism of New Attorneys' Skills) (citing Bintliff, *supra* n. 24, at 258-59).

C. Brooklyn Law School Survey⁷⁶

In April 2010, we surveyed 210 upper-level Brooklyn Law School students about their own habits when conducting legal research for school and when conducting legal research outside of school for a “work, internship and externship” (WIE). Our goal was to learn how often students still used print sources (if at all), which sources they prefer (for print and online research) and why. We also wanted to know whether there was a difference in how they conduct research when they are working on school assignments compared to when they are working on WIE assignments, how they prepare for conducting research (if at all), where they start their research, and whether they consider reliability or cost of online searches. We wanted to see how our students rated their own research skills and whether they feel there should be more of a connection between their substantive-law classes and researching those areas of law. Lastly, we wanted to gauge how we were preparing our students for practice.

1. Formulating a research plan

Our survey results confirm many findings of law firm studies.⁷⁷ To research legal issues, students reported employing a number of strategies.⁷⁸ Most often, students reported reviewing their notes (67%). The next most frequent strategy (58%) was to search the Internet. Only 36% of those students surveyed reported developing a list of search terms before researching an issue. Furthermore, a mere 14% reported that they would draft an outline of a research plan. In contrast to many studies, 42% of the students surveyed reported that they identified a treatise or practice guide when preparing to research. The vast majority of the students surveyed (81%) reported that they did not consider the cost of a search before running a query in a fee-based website because Westlaw and LexisNexis are free for law students.⁷⁹ Our results mirror findings in law firm studies in which senior attorneys reported that new associates were unable to conduct efficient searches.⁸⁰

The responses show that a large number of students chose to begin their research by searching the Internet rather than by using their legal analysis and reasoning skills to develop a research plan. When asked why

⁷⁶ See Kaplan-Darvil Appendix, <http://www.alwd.org/LC&R/kaplan-darvil-appx.html> (Survey Questions, Darvil/Kaplan Brooklyn Law School Survey on Student Research Habits, Spring 2010).

⁷⁷ *Id.*

⁷⁸ *Id.* This question allowed students to check all options that applied to them.

⁷⁹ Students have a misconception that Westlaw and LexisNexis are free to them as students. Their law schools pay substantial fees for the licenses to use these databases, which come directly out of students' tuition.

⁸⁰ See *supra* pt. III(B) (Law Students' Research Skills: What's Missing?).

they visited a particular website, students often reported that it was the easiest option available. A random Internet search may not provide the most relevant or reliable results.⁸¹ Although a search engine or database's ease of use is significant for a researcher, the ability to retrieve reliable, accurate, and authoritative results is of greater significance to attorneys and their clients. Law students need to understand that the easiest option is not always the best option and should be encouraged to formulate a research plan.

2. Implementing the research plan

a. Electronic vs. print

As anticipated, students rely heavily on electronic sources when conducting research. Over 90% of students surveyed conducted 76% of their research for school and WIE online. Of those who reported using print sources in addition to online sources more frequently for WIE than for school, 56% reported that they used print sources for only 1% to 25% of their research. In contrast, 35% reported that they did not use print sources for WIE at all. Only 7% responded that they used print sources more than a quarter of the time. Comparatively, 42% reported using print sources for schoolwork between 1% and 25% of the time. Nearly half of students⁸² reported never using print sources at school, and only 7% used print sources 50% of the time or more. Students who use print sources for the majority of their research are in a small minority (less than 10% for either school or WIE). These results confirm that students are increasingly relying on online sources for research.

b. Preferred online research tools

Ninety-three percent of those surveyed reported that they used Westlaw to conduct online legal research for school. Eighty-three percent reported that they used LexisNexis to perform online legal research in school. Comparatively, the next most used source was Wikipedia, which 57% of students reported using. The numbers were similar for students researching for WIE. Eighty-two percent reported using Westlaw for WIE and 72% reported using LexisNexis for WIE. Google came in a close third, with 70% of students reporting usage of this site for WIE research. When asked which research tool they would consult first when beginning a legal research project, 56% reported they would start with Westlaw, 38% with

⁸¹ Molly McDonough, *In Google We Trust*, 90 ABA J. 30, 32 (2004) (quoting U.S. District Judge Samuel B. Kent: "No Web site is monitored for accuracy, and nothing contained therein is under oath or even subject to independent verification absent underlying documentation. Moreover, the court holds no illusions that hackers can adulterate the content on any Web site from any location at any time.").

⁸² Forty-seven percent. See Kaplan-Darvil Appendix, *supra* n. 76.

Google and 30% with LexisNexis. To identify a relevant case about a topic, 56% of students would start with Westlaw, 31% with LexisNexis and only 9% with Google. When asked why they chose to begin their search at a particular site, 49% said it was the easiest option.

These results show that students rely on sources that are either highlighted in their first-year legal writing course (Westlaw and LexisNexis) or that are familiar to them outside of school (Google and Wikipedia). The results also demonstrate that the students surveyed do not prefer to use other legal databases, like Bloomberg Law or PACER. These databases are likely not discussed in their first-year legal writing course. The students therefore have no exposure or limited exposure to these sources. Our findings emphasize the need to provide training in these databases as well as others that are frequently relied on by practitioners. These responses also again reinforce the need for legal research instructors to emphasize that a source's ease of use does not necessarily equate with efficient research.

c. Vetting websites

Nearly 80% of those students surveyed reported using free websites to conduct legal research. The most popular of these sites was Google, used by 48% of the students. 16% reported using Wikipedia and 15% used the Cornell statutes website.⁸³ Although having free websites certainly makes information more accessible, it does not necessarily mean that such information is accurate or reliable. The students surveyed are aware of this problem, and, in fact, 88% reported checking their reliability when using these sites. When asked how they did this, 57% reported looking for information about the author or the site; 52% looked for the date of the article; 49% checked to see if the story cited other sources, 35% looked to identify the website's publisher and 40% validated the website with another official or reliable source.⁸⁴ The last statistic, while promising, is also discouraging because it means that 60% of students do not validate the information they find on free websites with another official or reliable source.

In a professional environment, lawyers do not rely on websites like Wikipedia to find and interpret the law. Even though some students reported that they used websites such as Wikipedia and Google to obtain an overview of the topic, they still need to consult more reputable sources for the information required. It is important for law students to understand that discrepancies are common in different sources and

⁸³ Leg. Info. Inst., Cornell Univ., *Constitutions, Statutes, Codes*, <http://www.law.cornell.edu/statutes.html> (accessed Mar. 14, 2011).

⁸⁴ Students could check all that apply. See Kaplan-Darvil Appendix, *supra* n. 76.

therefore they must verify any information found on the Internet with an authentic or official source.

3. Students' opinions about legal research instruction

The majority of students surveyed in our study believe that legal research instruction needs a greater emphasis in the law school curriculum. Seventy-one percent reported that they would like to see more of a connection between legal principles and legal research in their substantive-law classes. As one student noted in the comments section, "It would be beneficial upon entering practice. Spending hours on research is not efficient and increases costs to clients." Several students who answered this question affirmatively cited the need to conduct research as a lawyer. One student who answered "yes" wrote, "Research is the most important skill you learn in law school and is actually applicable in WIE. There should be a much greater emphasis on research beyond the legal writing course." Another student voiced her frustration with the current law school curriculum because "[research] is what you do as a lawyer, not taking an irrelevant test that merely tests your test-taking skills." These quotes demonstrate that the law students surveyed expect to graduate with a set of skills that will enable them to practice competently. Law schools have a responsibility to meet this expectation and to ensure that their students are trained not only to think like lawyers but also to practice like lawyers.

IV. Recommendations for Reform

Over the last several years, numerous credible reports have advocated change in legal education.⁸⁵ All of these reports have called for an increased attention to professional-skills training in law school.⁸⁶ The MacCrate Report advocates integrating legal skills, including research instruction, and professional values into the law school curriculum.⁸⁷ The MacCrate Report is the product of the American Bar Association's Task Force on Law Schools (Task Force).⁸⁸ The Task Force was charged with

85 *Cramton Report*, *supra* n. 1; *MacCrate Report*, *supra* n. 1, *passim*; *Carnegie Report*, *supra* n. 1, at 93–95; *Best Practices*, *supra* n. 1, at 5, *passim*.

86 *MacCrate Report*, *supra* n. 1, at 330–34; *Carnegie Report*, *supra* n. 1, at 14; *Best Practices*, *supra* n. 1, at 5. Note that over the last thirty years opportunities for law students to represent clients in a supervised clinical setting and to work outside the law school in externships have grown. N. William Hines, *Ten Major Changes in Legal Education over the Past 25 Years*, http://www.aals.org/services_newsletter_presNov05.php (AALS 2005).

87 *MacCrate Report*, *supra* n. 1, at 128. The MacCrate Report is the product of the American Bar Association's Task Force on Law Schools and the Profession: Narrowing the Gap, which was created in 1989 to study and report on how to best prepare law students for practice. *Id.*

88 *Id.*

mediating the debate between practitioners and legal scholars over how to best prepare law students for practice.⁸⁹ The practicing bar argues that students should graduate with a set of basic skills, such as the ability to draft a variety of legal documents.⁹⁰ Doctrinal legal educators argue that law schools are a place of scholarship, and their job is to teach students to think critically.⁹¹ The Task Force, addressing this disconnect, assessed the legal profession and identified ten fundamental skills and four fundamental values that every lawyer should acquire before representing clients.⁹² Legal research was one of the ten fundamental skills.⁹³

In defining the fundamental skill of legal research, the MacCrate Report outlined three basic elements:⁹⁴ First, a lawyer should understand the nature of legal rules and institutions, which requires familiarity with case law, statutes, administrative regulations and agency opinions, rules of court, and the Restatements of Law and model or uniform codifications.⁹⁵ It also requires an in-depth understanding of which source provides the controlling principles for the resolution of an issue and what legal remedies are available.⁹⁶ Second, a lawyer should know how to use the fundamental tools of legal research.⁹⁷ Specifically, the Report explained that a lawyer should know what the key primary and secondary legal sources are and how and when to use each.⁹⁸ Third, a lawyer should know how to design and implement a coherent and effective research plan. This requires that a lawyer apply her knowledge of legal institutions, legal rules, and legal research tools to the issue involved. In doing so, a lawyer needs to formulate the specific issues to research, identify and evaluate a range of research strategies, select the most effective ones, and then implement the plan.⁹⁹ The Report emphasized that legal research is a complex conceptual skill that requires an understanding of a wide range of legal tools and an understanding of the nature of the law and legal remedies.¹⁰⁰

The Report concluded with sixty-four recommendations to enhance a lawyer's acquisition of these fundamental skills and values.¹⁰¹ Of these,

⁸⁹ *Id.*

⁹⁰ *Id.* at 4–6; see also Mangan, *supra* n. 9 (explaining how this debate continues to this day).

⁹¹ *MacCrate Report*, *supra* n. 1, at 4.

⁹² *Id.* at 138–41. The fundamental skills are problem solving, legal analysis and reasoning, legal research, factual investigation, communication, counseling, negotiation, litigation and alternative-dispute-resolution procedures, organization and management of legal work and recognizing and resolving ethical dilemmas. The fundamental values are the provision of competent representation; striving to promote justice, fairness, and morality; striving to improve the profession; and professional self-development. *Id.*

⁹³ *Id.* at 138.

⁹⁴ *Id.* The report further broke down each of these elements into specific subcategories.

⁹⁵ *Id.* at 157–58.

⁹⁶ *Id.* at 158.

⁹⁷ *Id.* at 159.

⁹⁸ *Id.*

⁹⁹ *Id.* at 160–63.

¹⁰⁰ *Id.* at 163.

¹⁰¹ *Id.* at 8.

twenty-five were specifically addressed to law schools.¹⁰² These recommendations included encouraging interaction between the core subjects and skills development, employing a wide variety of instructional methods to teach legal research, teaching the concepts and theories that underlie the values-and-skills courses, providing students with an opportunity to perform lawyering tasks and then giving students appropriate feedback on their performance, and developing training sessions run jointly by employers and law schools.¹⁰³ The MacCrate Report's recommendations emphasized the need to integrate the teaching of these fundamental skills and values throughout a law student's education¹⁰⁴ rather than to teach them through isolated and inconsistent courses.¹⁰⁵ It is through this integration that a law student learns how the core skills and values are intertwined in a variety of practice settings.¹⁰⁶

More recently, the Carnegie Report also emphasized the importance of teaching practical legal skills like research and concluded that law schools do not do a good enough job of helping students develop professional competence and identity.¹⁰⁷ The Carnegie Report called for a more integrated curriculum that combines traditional analytical courses with practical training that gives students a better understanding of what practicing law is all about.¹⁰⁸

The Carnegie Foundation's two-year study of legal education involved a comprehensive look at teaching and learning in American and Canadian law schools. Intensive fieldwork was conducted at a cross-section of sixteen law schools during the 1999–2000 academic year. The Carnegie Report found that law schools have proven themselves to be exceptionally successful at training their students to master “a distinctive habit of thinking.”¹⁰⁹ In fact, it found that law students “demonstrate new capacities for understanding legal processes, for seeing both sides of legal arguments, for sifting through facts and precedents in search of the more

102 *Id.* at 327–30.

103 *Id.* 330–34.

104 *Id.* at 259–60; John Burwell Garvey & Anne F. Zinkin, *Making Law Students Client-Ready: A New Model in Legal Education*, 1 *Duke Forum L. & Soc. Change* 101, 111 (2009).

105 *MacCrate Report*, *supra* n. 1, at 234–35.

106 Although there have been numerous changes in legal education especially in the legal writing and clinical fields in response to the MacCrate Report, “little attention has been paid to one fundamental lawyering skill—legal research.” Barbara Bintliff, *Legal Research: MacCrate's 'Fundamental Lawyering Skill' Missing in Action*, 28 *Leg. Ref. Servs. Q.* 1, 1 (No. 3/4, 2009) (discussing the failure of law schools to provide other than cursory legal research education).

107 *Carnegie Report*, *supra* n. 1, at 87–88 (noting that “faculty view courses directly oriented to practice as of secondary intellectual value and importance”); *see also Best Practices*, *supra* n. 1, at 6.

108 *Carnegie Report*, *supra* n. 1, at 88.

109 *Id.* at 186.

plausible account, for using precise language, and for understanding the applications and conflicts of legal rules.”¹¹⁰ However, it also found that the “case-dialogue method”¹¹¹ encourages students to consider “as ‘facts’ only those details that contribute to someone’s staking a legal claim on the basis of precedent.”¹¹² In contrast,

the task of connecting these conclusions with the rich complexity of actual situations that involve full-dimensional people, let alone the job of thinking through the social consequences or ethical aspects of the conclusions, remains outside the case-dialogue method. Case issues such as social needs or matters of justice do get attention in some case-dialogue classrooms, but these issues are almost always treated as addenda.¹¹³

Hence, the Carnegie Report suggested that law schools need to do a better job of integrating the teaching of legal doctrine with a stronger focus on students learning practical “lawyering” skills and understanding the ethical and moral challenges that lawyers face.¹¹⁴

The Carnegie Report recommended that law schools offer a more integrated curriculum and encouraged faculty to work across that curriculum. It suggested that law schools revisit their traditional hierarchies that value teaching legal scholarship over clinical instruction in determining how best to reallocate resources. It also suggested that law schools make better use of the second and third years of study by offering opportunities for students to develop their specialties, to complete advanced clinical training, and to work closely with faculty.¹¹⁵

Some law schools have reacted positively to the findings and recommendations of the Carnegie Report and have revised their curricula. For example, Washington and Lee University School of Law has thrown out its traditional third-year curriculum and replaced it with a series of legal simulations meant to prepare students to practice law in the real world.¹¹⁶ First-year students at the University of California, Irvine, School of Law take a yearlong course examining different legal careers and the ethical

¹¹⁰ *Id.*

¹¹¹ *Id.* at 51.

¹¹² *Id.* at 53.

¹¹³ *Id.* at 187.

¹¹⁴ See generally *id.* at chs. 3–4.

¹¹⁵ *Id.* at 120–22.

¹¹⁶ See *About the J.D. Program at W&L*, Wash. & Lee Univ. Sch. L., <http://law.wlu.edu/admissions/page.asp?pageid=311> (accessed Mar. 14, 2011).

and professional issues associated with those career tracks.¹¹⁷ The University of California at Los Angeles School of Law has a new LL.M program to give recent law school graduates the skills their predecessors would have developed as law firm associates.¹¹⁸

The response of the legal research community to the Carnegie Report's recommendations includes the Boulder Statement on Legal Research Education. This statement reflects consensus on the theoretical foundation of pedagogy for legal research education.¹¹⁹ The statement reads,

Legal research education teaches the resolution of legal problems through an iterative and analytical process. Students will experience a practical apprenticeship of identifying significant facts; determining legal issues and problems; and locating, evaluating, and manipulating research authorities. Students will experience a cognitive apprenticeship by learning the importance of understanding the legal system in which their question arises and evaluating available legal resources. Through this apprenticeship the student will synthesize information about legal systems and resources to identify the best research plan for a given question. The students will also learn to continually re-evaluate their progress and results to arrive at the optimal answer to the legal problem. Throughout the process, students will learn to apply the professional and ethical norms implicated by their research, which will reinforce their apprenticeship of identity and purpose. For legal research instruction, this includes an ongoing examination of professional standards including the identification of ethical responsibilities, the avoidance of plagiarism, and the fulfillment of the ethical duty to conduct adequate and thorough research.¹²⁰

In addition to these recommendations for reforming legal education, the American Bar Association's Standards¹²¹ state that a sound legal education provides a curriculum that develops "skills of legal analysis, reasoning, and problem solving; oral and written communication; legal research; and other fundamental skills necessary to participate effectively

117 See *First Year Curriculum*, Univ. Cal. Irvine Sch. L., <http://www.law.uci.edu/registrar/curriculum.html> (accessed Mar. 14, 2011).

118 See *LL.M. Degree Requirements and Specializations*, Univ. Cal. L.A. Sch. L., <http://www.law.ucla.edu/home/index.asp?page=802> (accessed Mar. 14, 2011).

119 Legal research professionals attended The Conference on Legal Information: Scholarship and Teaching at the University of Colorado on June 21–22, 2009, to discuss legal information scholarship and instruction. There, the Boulder Statement on Legal Research Education was developed. See *Introduction: Boulder Statement on Legal Research Education*, www.colorado.edu/law/events/legalResearchEducation.pdf (accessed Mar. 14, 2011).

120 *Id.*

in the legal profession.”¹²² To develop these skills, Standard 302(a)(2) requires law schools to provide each student with substantial instruction in “legal analysis and reasoning, legal research, problem solving, and oral communication.”¹²³ To fulfill that mandate, Interpretation 302–2 encourages law schools “to be creative in developing programs of instruction in professional skills related to the various responsibilities which lawyers are called upon to meet.”¹²⁴ The Standards and Interpretations promote the development of skills instruction in a variety of settings and in various ways.¹²⁵ This creative freedom encourages law schools to tailor their skills instruction to the needs, interests, and learning styles of their students.

The ABA Standards and the MacCrate and Carnegie Reports call for change and challenge law schools to employ creative techniques and tools to prepare law students for the practice of law. Both the Standards and the reports recommend using nontraditional methods to teach legal skills. They encourage law schools to design a curriculum that meets the needs and demands of practitioners. For legal research instruction, these reports challenge law schools to rethink and reshape the curriculum to better teach today’s and tomorrow’s law students how to effectively access and interpret the law. New teaching strategies and new technologies are available and should be used to teach law students how to research legal

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121 The American Bar Association’s (ABA) Section of Legal Education and Admission to the bar is the United States Department of Education’s designated accreditation agency for programs that lead to a first professional degree in law. In a majority of jurisdictions, students are required to graduate from an ABA-accredited law school in order to gain admission to the bar. Law schools must meet the ABA’s Standards for Approval of Law Schools (Standards) to be accredited. The Standards were created and are periodically modified to ensure the competence of those entering the legal profession. The Standards serve as a baseline for law schools so that they provide a sound legal education to their students. Accompanying each standard is an interpretation that offers guidance on how to implement it. The Standards were first created in 1921 and have been modified at least five times since their inception. *ABA Standards and Rules*, *supra* n. 17, at iv–vi. As of July 2010, the present Standards are again under revision. The objective of this revision is to make the Standards outcome-focused. For example, a proposed revision of Standard 302 states,

(a) A law school shall identify, define, and disseminate the learning outcomes it seeks for its graduating students...

(b) The learning outcomes shall be consistent with and support the stated mission and goals of the law school. The learning outcomes shall include:

(2) proficiency as an entry level practitioner in (i) legal analysis and reasoning, legal research, problem solving...

ABA Sec. Leg. Educ. & Admis. to B., Stand. Rev. Comm., *Student Learning Outcomes Draft for January 8–9[,] 2010 Meeting*, <http://www.abanet.org/legaled/committees/comstandards.html> (*scroll down* heading Meeting Date: January 8–9, 2010; *follow link* to Standards 301–305: Student Learning Outcomes under the heading) (accessed Mar. 14, 2011) [hereinafter *Student Learning Outcomes Draft*]. The ABA’s shift in focus on outcome measures creates an even greater imperative to train students to both think and practice like lawyers.

122 *ABA Standards and Rules*, *supra* n. 17 at viii.

123 *Id.* at 21.

124 *Id.* at 22.

125 *Id.*; *see also Student Learning Outcomes Draft*, *supra* n. 121, at Interpretations 302–2; 302–3.

issues in an ever-changing legal landscape. Likewise, the shift in the legal research paradigm and the dissatisfaction of the practicing bar require law schools to reinvent how legal research is taught.¹²⁶ Simply put, legal research instruction should reflect the current state of the law and meet the practicing bar's expectations.

V. Suggestions for Changing How We Teach Legal Research

In addition to the recommendations of the studies and reports that legal research instruction reflect the needs of law practice, law schools must pay attention to Millennial students when considering possible changes to research instruction. Factors to be considered when revamping the research curricula and changing teaching styles include understanding how Millennial students learn, how they use technology, and how they communicate.

A. The Millennials

Students of the "Millennium Generation" or "Generation Y" were born between 1982 and 2000. They are our current and future law students.¹²⁷ Experts say that we can expect a different set of values and expectations from this group of young people. These expectations and values potentially clash with those of authority figures.¹²⁸ Teaching techniques that have motivated law students in the past do not necessarily work with Millennials. As today's media-saturated Millennials enter law school, they find themselves forced into lecture teaching and casebook modes of instruction, most of which are more than 100 years old.¹²⁹ Those teachers who try to motivate and engage students using these old techniques often become frustrated, as do their students.

In order to teach this generation effectively, it is necessary to understand some of their common characteristics and shared life experiences. Millennials believe themselves to be technologically savvy and

126 See Stolley, *supra* n. 20, at 7–8.

127 Junco & Mastrodicasa, *supra* n. 10, at 6 (Millennials are "the largest generation in history, surpassing 80 million in number").

128 *Id.* The book discusses connecting to the Millennial, or "Net," generation in chapters 6 and 8. Millennials are unique in how they learn and experience the classroom: "With the emergence of the internet, this generation has the ability to find information more easily than previous generations, and thus have become more cynical of the media and authority figures." Susan Jakes, *Gen-Xers & Millennials*, <http://www.ces.ncsu.edu/depts/fcs/NCECA/GenXers%20Millennials.pdf> (accessed Mar. 14, 2011).

129 Christopher C. Langdell of Harvard Law School is credited with originating the case method, which is still the primary method for teaching in law schools. Josef Redlich, *The Common Law and The Case Method in American University Law Schools: A Report to the Carnegie Foundation for the Academy of Teaching* 7–10 (Merrymount Press 1914).

efficient multitaskers. They grew up using computers and relating to the world through technology.¹³⁰ These qualities can result in a tendency to be impatient and to have expectations of instant gratification.¹³¹ According to a report from the Department of Education, published in 2004, ninety percent of students between the ages of five and seventeen used computers and ninety-four percent of these teenagers used the Internet for school-related research.¹³² They value personal time, they can be demanding, and they believe they should be able to “have it all”; they are quite adaptable and like working in groups and collaborating.¹³³

Millennials are also a complex generation, with some conflicting characteristics. Although they are hard working and achievement oriented, most Millennials do not excel at leadership and independent problem-solving. Although they are academically driven and exert excessive pressure on themselves to succeed, they tend to forgo developing their critical-thinking skills.¹³⁴ They want freedom and flexibility, but they also want rules and responsibilities to be spelled out explicitly. They want to play by the rules, but there is a hesitancy to think outside the box. Finally, their desire for teamwork tends towards conformity.¹³⁵ Rather than favor a teacher-centered approach in which the instructor is the center of instruction and learning,¹³⁶ Millennials are more comfortable in a nontraditional learning environment that is learning-centered.¹³⁷ In this more

130 See Matt Richtel, *Growing Up Digital, Wired for Distraction*, N.Y. Times A1 (Nov. 21, 2010).

131 It is important to mention that though these students were born into a world of technology and it is second nature to them, it doesn't necessarily mean that they understand how to use all of the tools appropriately or efficiently.

132 U.S. Dept. Educ., Off. Educ. Tech., *National Education Technology Plan: Toward a New Golden Age in American Education: How the Internet, the Law and Today's Students Are Revolutionizing Expectations* 17 nn. 28–34 (2004) (available at <http://www2.ed.gov/about/offices/list/ost/technology/plan/2004/plan.html#title>).

133 Junco & Mastrodicasa, *supra* n. 10, at. 10.

134 *Id.* (“They tend to think that short-term achievement equals long-term success; therefore they focus on grades and not on the processes by which grades are achieved.”).

135 Ron Alsop, *The Trophy Kids Grow up: How the Millennial Generation is Shaking up the Workplace* 1–22 (Jossey-Bass 2008).

136 The teacher-centered classroom has long been an integral aspect of legal education. Certain teaching methods, particularly the Socratic Method, reflect a desire for and existence of a strongly teacher-centered classroom. Many other indicia of the teacher as focal point of the legal classroom exist, including pressuring students, assigning an extraordinary work load, covering material at a fast pace, and wanting students to have an individualized experience. Through these means, law teachers maintain rigid control over students and set parameters for their work when they are in the classroom in the hope that they will act consistently once outside. Embodied here are the precepts that the teacher/scholar knows what is best for the students and that focusing on the students' needs is an inappropriate approach to education in the legal profession.

Clifford S. Zimmerman, “*Thinking Beyond My Own Interpretation: Reflections on Collaborative and Cooperative Learning Theory in the Law School Curriculum*,” 31 *Ariz. St. L.J.* 957, 977 (1999).

137 Learning-centered teaching is defined as “a style of instruction that is responsive, collaborative, problem-centered, and democratic in which both students and the instructor decide how, what, and when learning occurs.” Pamela A. Dupin-Bryant, *Variables Related to Interactive Television Teaching Style: In Search of Learner Centered Teaching Style*, 1 *Intl. J. Inst. Tech. & Distance Learning* 42 (2004). Learner-centered teaching methodologies have been used widely in a variety of fields, such as

modern approach, interactions between instructors and students facilitate the learning process through discovery, inquiry, and problem-solving.¹³⁸ Millennials want to immediately engage in the process; they want to express their views and incorporate their experiences into their learning; they learn by doing.¹³⁹

As legal educators, we need to take the time to learn and understand the characteristics of our Millennial students. We should redesign teaching methodologies to make sure that these students are prepared to enter the profession.¹⁴⁰ Legal research instruction provides numerous opportunities to be innovative with teaching styles and technology, to incorporate many of the recommendations for change discussed above and to use teaching techniques that will excite and encourage our Millennial students. By transforming the way we teach legal research, we will better prepare our students to practice law in today's world.

B. Teaching Legal Research to Today's Students

Due to the profound changes in technology and how Millennials learn, it is up to us as educators to rethink and reimagine how to teach legal research.¹⁴¹ One consideration is the dynamic shift in how lawyers conduct and use legal research in the workplace. Law students should learn to use the resources and tools frequently relied on by attorneys so that they will be better prepared to practice. Another consideration is the technological tools that are available and that can be used to accommodate the skills and learning styles of our students. In order to ensure that these considerations are taken into account when designing a legal research course, the course should be multimedia and exploratory.¹⁴² It

accounting, information systems, business statistics, social sciences and distance learning, and have been successfully implemented to reform education in other countries. Some scholars suggest that learner-centered teaching techniques should be used to design courses in which technology and multimedia play a vital role. See generally Donald A. Norman & James C. Spohrer, *Learner-Centered Education (Introduction to the Special Section)*, 39 Commun. Assn. Computing Machinery 24 (1996).

138 Dupin-Bryant, *supra* n. 137.

139 Junco & Mastrodicasa, *supra* n. 10, at 141 (noting that millennials learn well through direct participation or experience).

140 See *Best Practices*, *supra* n. 1, at 3 ("It is time for legal educators, lawyers, judges, and members of the public to reevaluate our assumptions about the roles and methods of law schools and to explore new ways of conceptualizing and delivering learner-centered legal education.")

141 Leslie Larkin Kooney, *Giving Millennials a Leg-Up: How to Avoid the "If I Knew Then What I Know Now" Syndrome*, 96 Ky. L.J. 505, 507 (2008) ("We teach law students to question as part of their educational experience; we should certainly not be surprised when Millennials, who by their nature are explorers, turn around and question the usefulness and viability of the existing law school approach to education.")

142 Millennials prefer to learn using digitally provided services and resources and are "more engaged through active learning, effective experiential processes such as games, case studies, hands-on experiences, and simulations that can speed their learning and hold their interest." Richard T. Sweeney, *Millennial Behaviors & Demographics* 3 (2006) (available at <http://library1.njit.edu/staff-folders/sweeney/Millennials/Article-Millennial-Behaviors.doc>).

should include collaborative learning opportunities, be relevant, cost effective, integrated throughout the curriculum, and taught mostly by professors with expertise in legal research. Specialized training courses should also be available for those students who wish to study research in depth.

1. Research classes should be multimedia.

To engage the interest of our law students, law school faculty need to use technology to communicate and to teach. One way to do this is to incorporate new technologies into the curriculum. According to one study, Millennials want more variety in class.¹⁴³ “This is a culture that has been inundated with multimedia and they’re all huge multitaskers, so to just sit and listen to a talking head is often not engaging enough for them.”¹⁴⁴ Today’s students came of age immersed in online environments and rely on constantly changing modes of technology to communicate.¹⁴⁵ Various multimedia tools and resources should be employed in order to teach legal research effectively to Millennial law students. By using a variety of teaching tools and resources, professors will help their students develop the skills necessary to conduct legal research in a constantly evolving environment.¹⁴⁶ Armed with the most up-to-date tools, law students will be better able to adapt and use new legal research tools as they enter the marketplace.¹⁴⁷

It is not enough, however, for research instructors to simply demonstrate the tools and resources available. Research instructors must encourage their students to think critically about these resources and to evaluate the diversity of information types. By doing so, they will teach their students to be information literate. Information literacy is the ability to “recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information.”¹⁴⁸ This is an essential skill if one is to practice law in a competent manner.¹⁴⁹ Research instructors can help students become information literate by integrating different media and modes of technology into the class design. One way to

143 Christy Price, *Why Don't My Students Think I'm Groovy?: The New "R's for Engaging Millennial Learners*, 23 *Teaching Prof. 1*, 5 (No. 7, 2009)

144 *Id.*; see also Thomson, *supra* n. 8, at 21–23.

145 Thomson, *supra* n. 8, at 21–23.

146 *Id.*

147 *Id.*

148 Assn. of College & Research Lib., *Presidential Committee on Information Literacy: Final Report* (Jan. 10, 1989) (available at <http://www.ala.org/ala/mgrps/divs/acrl/publications/whitepapers/presidential.cfm>).

149 Thomson, *supra* n. 8, at 49–53 (discussing the increasing use of free online legal research sources by practicing lawyers, the increasing use of internet citations in judicial opinions and the rise of electronic discovery).

do this is to add to course page links to reliable and free legal websites commonly used by practitioners such as GPOAccess.gov, federal and state agency websites, Cornell's Legal Information Institute, and Jurist Law. Instructors can discuss these free sources and why they are reliable. Instructors should then ask students to add their own links related to a particular research assignment. The students should also annotate each link, explaining how they vetted the posted website and why they believe it to be a reliable source. This type of exercise not only introduces students to popular resources relied on by attorneys but also promotes information literacy by forcing students to think critically about different Internet sources.¹⁵⁰ As a result, students will graduate with reliably more of the knowledge and skills needed to practice competently.

Another way for research instructors to make their classrooms a multimedia learning environment is to use online technology. For example, instructors can use wikis¹⁵¹ to monitor a student's legal research process.¹⁵² Wikis are an excellent collaborative tool, which allow students to work on a research project asynchronously.¹⁵³ Because students can work on a project separately, wikis provide students with a degree of autonomy in the final product while permitting them to work together on the project.¹⁵⁴ One example of a popular and free software wiki package is MediaWiki.¹⁵⁵ MediaWiki is the program that is used to run Wikipedia.¹⁵⁶ MediaWiki is an excellent tool for a legal research class because students are familiar with its format and functionality.¹⁵⁷ It can be used on any web browser and multiple users can easily create and edit content.¹⁵⁸ When using this tool for an assignment, an instructor should register as an administrator to control who has access to editing the wiki.¹⁵⁹ The instructor can then group students and have them use MediaWiki to analyze a research assignment's legal issues and identify primary and secondary sources. The instructor can review the project periodically to

150 See Bernard J. Hibbits, *The Technology of Law*, 102 Law Lib. J. 101, 107–08 (2010) (discussing the three basic skills necessary to be information- or net-literate).

151 Wikis are collaborative websites whose contents can be edited by anyone who has access to them. *American Heritage Dictionary* 1567 (4th ed., Houghton Mifflin Co. 2004).

152 See Thomson, *supra* n. 8, at 73–92.

153 *Id.* at 81–82.

154 *Id.*

155 See MediaWiki, <http://www.mediawiki.org/wiki/MediaWiki> (last modified Jan. 24, 2007, 19:51).

156 *Id.*

157 See *supra* pt. III(C)(2)(b) (Brooklyn Law School Survey Discussion: Preferred Online Research Tools).

158 See Kevin Purdy, *Lifehacker.com, Top 10 Web Collaboration Tools (That Aren't Google Wave)*, <http://lifehacker.com/#15373339/top-10-web-collaboration-tools-that-arent-google-wave> (Aug. 5, 2010).

159 *Id.*

assess the group's research plan. This free tool is one that research instructors can use to encourage students to work together and to learn about the legal research process from each other.

Another effective online tool to monitor students' legal research process is mind-mapping software. Mind-mapping¹⁶⁰ software allows students to diagram complex legal topics¹⁶¹ and to create and refine their diagrams throughout the course of an assignment.¹⁶² Rather than grade a traditional research log, instructors can examine a student's Mind Map to determine how she conceived of a legal issue and approached a legal research problem.¹⁶³ Case Map, a LexisNexis product, is an example of a popular mind-mapping program¹⁶⁴ used by law professionals across the country. Case Map connects key facts and players with legal issues and integrates legal research into a map's organizational scheme.¹⁶⁵ Instructors can have students use this software to report systematically on the state of their research and analysis.¹⁶⁶ When an instructor examines a student's research process periodically, both the student and the instructor better understand where the student misstepped and how she may have derailed her research and analysis.¹⁶⁷ It also gives a student experience using a product she may be expected to use in practice.

By using different forms of technology, research instructors can also reinforce the concepts and skills taught in class. For example, podcasting technology can be used to record a lecture for students to listen to later. Using webcasting software, instructors can create online tutorials that allow students to practice a particular skill. Webcasting software is a multimedia tool that allows instructors to combine audio recordings, slideshows, documents, and videos. Two popular webcasting tools are WINK and Captivate. WINK is a free tutorial-creation program that allows instructors to dictate lessons while capturing screen shots, posting documents, and linking to websites.¹⁶⁸ Captivate is a similar product

160 Mind maps are nonlinear visual tools, which graphically show ideas in a relational context. The main topic is at the center of the map and subtopics radiate from the center. Mind maps can be created with paper or pens or with specialized software, like the ones described above. See generally Diane Murley, *Mind Mapping Complex Information*, 99 *Law Lib. J.* 175 (2007).

161 Thomson, *supra* n. 8, at 101–10; see also Karen L. Koch, *What Did I Just Do? Using Student-Created Concept Maps and Flowcharts to Add a Reflective Visual Component to Legal Research Assignments*, 18 *Persps.* 119, 119 (2010).

162 Thomson, *supra* n. 8, at 85.

163 *Id.*

164 See LexisNexis, *LexisNexis® CaseMap® Suite*, <http://www.lexisnexis.com/casemap/> (accessed Mar. 14, 2011).

165 *Id.*

166 Thomson, *supra* n. 8, at 105–10.

167 Koch, *supra* n. 161, at 120 (“Due to the iterative nature of the legal research process, flowcharts and concept maps are particularly well suited to help students understand and internalize the research process.”).

168 See DeBug Mode Wink, <http://www.debugmode.com/wink/> (accessed Mar. 14, 2011).

published by Adobe.¹⁶⁹ Like WINK, Captivate allows instructors to add images, screen shots, audio narrations, and videos to create a tutorial. Among Captivate's added benefits is the ability to quiz students on their understanding of the tutorial's concepts. Captivate also allows students to collaborate when taking the tutorial.¹⁷⁰

Another way to reinforce a course's concepts and skills is through gaming software, like Gameshow Pro.¹⁷¹ Gameshow Pro is a software program that allows users to create TV-style games using their own content.¹⁷² An instructor can use this technology to assess students' learning at different points throughout a semester.¹⁷³ An added benefit of gaming software is that law students have fun and gain confidence in their knowledge of legal research.¹⁷⁴ These tools and others should be used to effectively reinforce the skills and concepts discussed in class.

2. Collaborative learning should be used to teach research.

Millennials do not want a passive learning environment. They want assignments that are hands-on and exploratory. In addition to using technology, legal research instructors should incorporate collaborative learning into their lessons.¹⁷⁵ Collaborative work suits this generation's style; because Millennials have grown up working in groups and playing on teams, they enjoy working with their peers.¹⁷⁶ Collaborative learning

169 See Adobe.com, *Adobe Captivate 5*, <http://www.adobe.com/products/captivate/> (accessed Mar. 14, 2011).

170 *Id.*

171 Karin Mika, *Teachable Moments for Teachers*, 18 *Persps.* 6 (2009). In our Advanced Legal Research and International and Foreign Law Legal Research classes at Brooklyn Law School, we frequently use Gameshow Pro to run a mock quiz-show game at the beginning and end of the semester. In the first class, we do this to assess our student's knowledge of legal research tools and sources of law. It also requires students to introduce themselves to each other and to work together, setting a friendly and collaborative tone for the rest of the semester. In the final class, we do this to assess what they have learned and what they have missed. At the beginning of the semester, the quiz helps us to tailor the course to the students' knowledge and abilities. At the end of the semester, the quiz helps us assess what went right and what went wrong in the class. In a fun and nonthreatening way, students are also able to assess what they learned over the semester and hopefully feel confident about their legal research skills.

172 See Learningware.com, *Gameshow Pro 5*, <http://www.learningware.com/gameshowpro.html> (accessed Mar. 14, 2011).

173 Mika, *supra* n. 171.

174 *Id.*

175 In its list of fundamental skills and values, the MacCrate Report includes developing skills and procedures for effectively working with others (Skill 9.4) and hints at working with others in Skill 4, Factual Investigation. See *MacCrate Report*, *supra* n. 1, at 138–40. It also suggests the use of peer review, which is a collaborative method, for student evaluation. See *id.*

176 "Academic teamwork is so common that Net Gen students prefer to work in teams on academic projects because they feel less individual pressure." Junco & Mastrodicasa, *supra* n. 10, at 10.

177 Kenneth A. Bruffee, *The Art of Collaborative Learning*, 19 *Change* 42, 47 (No. 2, 1987) ("Collaborative learning calls on levels of ingenuity and inventiveness that many students never knew they had. And it teaches effective interdependence in an increasingly collaborative world that today flexibility and adaptability to change than ever before."); see also Zimmerman, *supra* n. 136, at 1003 (collaborative learning helps in "enhancing both brainstorming and issue spotting, sparking students' interest, developing strong research skills and better student judgment, demystifying the subject, and creating a higher level

enables students to practice conducting legal research in a structured setting that provides interaction, feedback, and reinforcement. Students learn from each other and tend to make better judgments than when working alone.¹⁷⁷ Students who work in groups often answer each others' questions and help each other when a problem or question arises. Moreover, teaching legal research in a collaborative learning environment teaches students to work together. It models real-life group dynamics and work situations in which lawyers regularly work on cases and projects in teams.¹⁷⁸ Students can work together to devise research strategies, solve research problems, brainstorm, and identify major issues and gain a deeper understanding of what is involved in each assignment.

Specifically, research instructors can assign students to work as a team to develop a research guide on an issue. They can work together to identify relevant primary and secondary sources of law and to provide effective search strategies for researching the issue. Students can use a wiki or html editor, like Google Pages, to design, post, and share their guide on the Internet.¹⁷⁹ Instructors can also have small groups of students research a specific topic or issue and present or teach their findings as a team to the class. They can use PowerPoint or Google Presentations to design their presentation. Additionally, instructors can run a simulation in which students in small teams interview a client. Prior to conducting the interview, the team can work together to research the potential legal issues involved and draft a set of questions for the client based on their research. Encouraging research students to collaborate on assignments will keep them engaged in the issues, allow them to learn from each other, and imitate real legal practice.

3. Legal research should be taught throughout the curriculum.

To meet the calls to action of both the MacCrate and Carnegie reports, legal research must be integrated throughout the law school curriculum. Fortunately, legal research is a skill that is easily integrated. It can be taught in skills courses, like drafting, appellate practice, or trial advocacy. It can also be woven into practical trainings, like school-sponsored clinics or externship programs. Similarly, it can be integrated into substantive-law

of enjoyment in learning from each other. Furthermore, the collaborative learning process provides better peer feedback, shared experiences, a sense of community, and greater similarity to real life lawyering.”)

178 Professor Clifford S. Zimmerman’s discussion of collaborative-learning theory (in general and in the legal writing context) can and should be similarly applied to teaching Millennials in the legal research context. See Zimmerman, *supra* n. 136, at 995. “Collaborative learning is a process premised on key assumptions about learners and the learning process: learning is an active, constructive process; learning depends on a rich context; learners are diverse; learning is inherently social; and learning has affective and subjective dimensions.” *Id.*

179 Many libraries also use the SpringShare product Libguides to create research guides. This tool can be easily learned and used by students.

courses. A real effort must be made in all law school classes beginning in year one to ensure that the research instruction the students receive in their research and writing classes will be further developed, refined, and reinforced in core curriculum courses.

Integrated research instruction helps students “to think [and practice] like a lawyer” by reinforcing fundamental concepts and doctrines and by introducing them to key sources of law.¹⁸⁰ In their doctrinal courses, faculty should assign readings not only from casebooks, but also from treatises and practice aids that are commonly relied on by practitioners.¹⁸¹ For example, in Federal Civil Procedure, readings could be assigned from *Moore’s Federal Practice* and Wright and Miller’s *Federal Practice and Procedure*. Through these readings, students will become familiar with the leading secondary sources in a particular area of law and experience how secondary sources help them understand a legal issue and how the issue fits within a broader context. Legal research-and-writing faculty might also consider coordinating research lessons with the substantive-law faculty.¹⁸² For example, a Legal Research and Writing professor could work with her students’ Criminal Law professor to develop a research assignment. Throughout the semester, the Criminal Law professor could emphasize various sources of law, which would help the students research the assignment and help them understand how the different sources relate to each other. The professor could ask the students to draw distinctions between the Model Penal Code and a state’s penal code and explain the status of the Model Penal Code as a source of law. She could also provide examples of how jurisdictions use the Model Penal Code to elucidate unsettled issues. This coordinated effort in designing and implementing research-and-writing assignments can facilitate the development of analytical skills and reinforce particular doctrines for students.¹⁸³

Because they are novice researchers,¹⁸⁴ students should be guided in the legal research process. Rather than provide students with edited versions of a case or a statute, faculty can teach research skills by asking their students to research an issue by identifying leading cases or

180 See Valentine, *supra* n. 65, at 214.

181 In a 2007 West Study, law firm librarians stated that the single most important skill a new associate can possess when entering a law firm is an understanding of the key sources available for specific practice areas. *Research Skills for Lawyers and Law Students*, *supra* n. 15, at 2.

182 Valentine, *supra* n. 65, at 215–16; see generally Kathy L. Cerminara & Elena B. Langan, *A Stranger in a Strange Land: A Doctrinal Professor’s Journey into the Legal Research and Writing Classroom*, 19 *Persps.* 29 (2010).

183 *Id.* at 210–12 (describing legal research as an iterative, problem-solving process that requires analytical and reasoning skills).

184 See 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, 189–90 (2007).

controlling statutes. For example, in an upper-level Evidence course, the professor could ask students to research the admissibility of opinion evidence in a state court and in a federal court. She could then foster a discussion about the differences in the rules and the implication of those distinctions. This type of research exercise is effective because it teaches students how to think critically and simulates what would be expected of them in practice.¹⁸⁵ A comparison of how the students approached the problem with how the professor approached the problem teaches students how to better design and implement research plans.¹⁸⁶ Through these research exercises, students can begin to refine the fundamental skills of legal research in preparation for practice.¹⁸⁷

Integrating legal research training into upper-level specialized courses is another method by which law schools can better prepare their students for practice. In a recent article, one commentator asserted that law schools are obligated to instruct students on statutory and regulatory law because of the shift in American Jurisprudence from private law to public law, the growth of the administrative state and the increasing transparency and accessibility of federal and state agencies.¹⁸⁸ For law schools to ignore these developments would be irresponsible. In upper-level courses on highly regulated areas of law like Administrative Law, Environmental Law, Securities Law, and Immigration Law, professors could teach their students about regulatory and statutory resources. For example, a Securities Law professor could assign readings from CCH's *Securities Law Reporter* and post links on the course web page to No Action Letters and Proposed Rules from the Securities and Exchange Commission's website. In taking these simple steps, a professor would expose students to the broad range of legal resources available and help prepare them for practice.

Based on the substantive material covered in class, professors in upper-level specialized courses should also create collaborative, fact-driven research exercises. For example, in an Environmental Law course, the professor could ask students to research whether a parcel of land would qualify as a Brownfield and to further research the implications of labeling property as a Brownfield. With the guidance of the professor, students could work together to frame the legal issue. Then the professor could assign one group of students to research administrative decisions or

185 Bowman, *supra* n. 66, at 553–54.

186 *MacCrate Report*, *supra* n. 1, at 331.

187 Bowman, *supra* n. 66, at 549–56.

188 Valentine, *supra* n. 65, at 185–86.

agency guidance materials and another to research the governing statutes and regulations. This type of hands-on learning benefits students by demonstrating to them how legal doctrine and skills intersect.¹⁸⁹

Similarly, in both skills courses and practical trainings, instructors and mentors should guide students in the legal research process. Through both exercises and “real world” assignments, students go beyond the basic first-year research instruction and develop more advanced research skills.¹⁹⁰ For example, students in an Employment Law Clinic could research the legislative history of the Pregnancy Discrimination Act and then use this information to support a motion or keep the information on file to support a future client’s claim. It is through these “real world” assignments that clinics and other skills courses encourage students to experience and explore the law through legal research.¹⁹¹

Another way skills courses can effectively integrate research instruction is through the collaboration of skills faculty with adjunct faculty and practitioners on the design of research problems. Because they are in the field, adjunct faculty and practitioners have a solid understanding of the types of issues new attorneys will face. Skills faculty should take advantage of this knowledge and use it to shape their assignments. For example, in an upper-level Real-Estate Drafting course, the professor could learn from a real-estate practitioner that many firms are drafting mezzanine loans to secure financing for real-estate development. With this in mind, the professor could have her students research and draft a mezzanine-loan agreement. By creating assignments that replicate current legal events, students will be more engaged in the assignment and better prepared to enter the work force.¹⁹² It is through a variety of research exercises integrated throughout their legal education that students begin to master the fundamental skill of legal research.¹⁹³

4. Students should be taught to perform cost-effective legal research.

A major criticism of new associates is their perceived inability to conduct cost-effective research.¹⁹⁴ Although teaching new associates how to research efficiently within a firm’s pricing plan is a task best suited for law firms, law schools should explain to students the general costs of research

189 See *supra* pt. V(B)(ii) (Collaborative Learning Should Be Used to Teach Research).

190 See *infra* pt. V(B)(v) (Legal Research Instruction Should Be Relevant).

191 *Id.*

192 *Id.*

193 Bowman, *supra* n. 66, at 549–56.

194 See *supra* pt. III(B) (Law Students’ Research Skills: What’s Missing?).

and how to search in various sources.¹⁹⁵ Whether a particular law office subscribes to a transactional plan, an hourly plan, a flat-rate plan, or to no plan at all, the time new lawyers spend on research is an expense generated for the law firm. For this reason, law students need to learn how best to design and implement a research plan.¹⁹⁶ If new associates and law students formulate a plan by first identifying relevant issues and sources of law, then evaluating how to begin the research process, they will save themselves a significant amount of time and frustration by avoiding wading through irrelevant material. By understanding what they are researching, they will have a better idea of when their research has concluded and will not waste unnecessary time continuing the search.

Cost-efficient research education should begin in a student's first-year legal research course and should continue in advanced legal research courses. For example, in first-year legal writing and research courses, students should be taught how to identify relevant secondary sources, which will quickly explain the law and bring them to leading cases and controlling statutes.¹⁹⁷ Professors should teach students how to find and use a secondary source's table of contents and index both in print and online. Because both tables of contents and indices are finite lists that can be browsed easily, they are more efficient search mechanisms than keyword searches.¹⁹⁸ Furthermore, many subscription databases do not charge for browsing a table of contents.¹⁹⁹ First-year students should also learn how to use finding aids to primary sources, such as citators, headnotes, and annotations. These tools provide low-cost ways of identifying additional, relevant, primary and secondary sources of law. Finally, professors need to teach first-year students the general costs of conducting searches in subscription-based databases and how to make the most of their search queries.

Similar training should be repeated and expanded upon in advanced legal research classes. In these classes, upper-level law students need to

195 See Podcast, *Law Librarian Conversations: Cost-Effective Research* (May 24, 2010) (available at <http://lawlibcon.classcaster.net/files/2010/05/Episode-6-May-24-2010-Librarian-as-Professional-Cost-Effective-Research.mp3>) (commentators argue that even if students are not taught about the intricacies of pricing plans they should be taught how to be efficient researchers); see also Sarah Gotschall, *Teaching Cost-Effective Research Skills: Have We Overemphasized Its Importance*, 29 Leg. Ref. Servs. Q. 149, 160–61 (No. 2, 2010) (arguing that when teaching legal research, less emphasis should be placed on cost containment and more emphasis should be placed on teaching students to be efficient researchers).

196 Meyer *supra* n. 20, at 312 (listing as causes for entry-level attorneys to incur excessive online research costs not planning before going online, engaging in fishing expeditions, and not using search language or connectors correctly); see also *Research Skills for Lawyers and Law Students*, *supra* n. 15 at 2.

197 See Stolley, *supra* n. 20, at 4–5; Meyer, *supra* n. 20, at 305–06, 308.

198 See *Research Skills for Lawyers and Law Students*, *supra* n. 15, at 3, 6.

199 Westlaw does not charge for browsing a table of contents. Depending on the pricing plan, LexisNexis might not charge to browse a table of contents.

learn a broader array of sources than they studied in their first year, i.e., practice aids, loose-leaf services, trial- and appellate-court documents and nonlegal periodicals and databases. Upper-level students should also learn how to identify and search within such sources. For example, research instructors should teach students to use advanced search features, like subject headings or field and segment limits, to identify relevant sources in a brief time frame. Using the material covered in class, instructors should create exercises that simulate “real world” assignments. After completing the exercises, students should then evaluate their search strategies in terms of efficiency, time, and thoroughness.

Because so much material is available online for free,²⁰⁰ law students need to learn how to identify, evaluate, and use this information. Starting in their first year, law students should be able to identify the reliable websites that post state and federal judicial opinions, statutes and regulations. First-year students should learn the difference between official and unofficial sources of law and the need to rely on official or otherwise authenticated sources of law. In advanced legal research classes, research instructors should show students how to access the growing body of free scholarly literature on the Internet. Students should also learn how to identify freely available position papers, briefs, reports, and other relevant but unpublished material. Upper-level law students should learn how to best use a search engine’s features to identify relevant articles, books, reports, briefs, case law, etc. When demonstrating free online sources, professors should teach law students how to authenticate sources.²⁰¹ By demonstrating the breadth of material available to law students and how to identify and access the relevant resources, law schools are providing their students with the legal research skills necessary to be competent and efficient practitioners.²⁰²

5. Legal research instruction should be relevant to current issues.

In addition to the way legal research is taught, the substance and assignments should also be relevant. Good legal research and analysis is time-consuming. It demands a great deal of practice. Instructors need to ensure that students understand how such work connects to researching

²⁰⁰ Thomson, *supra* n. 8, at 49–53.

²⁰¹ *Id.*; see also *supra* pt. III(B)(i) (Research Classes Should Be Multimedia).

²⁰² *Research Skills for Lawyers and Law Students*, *supra* n. 15, at 4. Law schools should require advanced research instruction. During their first year of law school, many students often do not fully understand the importance or complexity of conducting thorough legal research. But after their first legal internship or externship (for a judge, law firm, public-interest organization or government agency), many students see the light and are ready to take on the challenge of advanced research instruction. It is at this time that law schools require legal research training. Unfortunately, currently, legal research instruction declines significantly after the first year of law school.

as a practicing attorney. Millennial students are more likely to understand, care, and perform better when instructors connect their lessons to real-life situations, problems, and cases.²⁰³

Legal research classes that incorporate class exercises involving hot legal issues will be exciting to students. Instructors can identify issues to use in class by using legal news sources like legal blogs, Jurist Law, and BNA's Current Reports. Professors could assign students a project that entails finding agency and administrative material about oil spills, for example. Specifically, professors could have students identify regulations governing the drilling of oil and show them the websites of the Environmental Protection Agency, the Department of Interior, and the Minerals Management Service. Using this same issue, professors could teach students to identify statutes and case law related to oil spills. They could instruct students how to identify enabling statutes for agencies, as well as other relevant statutory authority like the Clean Water Act. They could teach them to use the digest system to find similar cases, such as the Exxon Valdez litigation. Or professors might focus on Arizona's new immigration statute. They could show students how a state law relates to federal statutes and regulations and how to use the statute's annotations to identify treatises, law reviews, and cases, and KeyCite and Shepard's to monitor and track the statute.

Professors might also consider inviting members of the bar to help teach a class or explain the importance of good research skills to the practice of law. During the first year, in particular, it is useful to have a practicing attorney come into class to discuss a current case or client with the students. The students can be given related research problems to solve in class that can be followed by a discussion of their research process and results and how they connect to the case's outcome or the client's situation. There is no better way to keep students engaged and motivated than to demonstrate that the skills they are learning in class are the ones they will need in the "real world."

6. Legal research should be taught by experts.

Most law schools use legal writing instructors, vendor representatives, or both, to teach the research portion of the first-year legal writing courses.²⁰⁴ Because law librarians are trained in legal research, they should be involved in developing and updating research programs.²⁰⁵ Also

²⁰³ See Price, *supra* n. 143, at 3 ("Use of 'real,' 'relevant,' and 'current' examples was one of the most obvious themes apparent among professors perceived as connected to millennial culture.")

²⁰⁴ See *supra* n. 17 and accompanying text.

²⁰⁵ Law librarians hold advanced or graduate degrees in research methodology.

because law librarians are constantly evaluating and using both electronic and print sources, they should participate in teaching.²⁰⁶ Law librarians' teaching or involvement in legal research courses increases the likelihood that our students will "become proficient researchers by the time they graduate."²⁰⁷

Historically, librarians taught legal research.²⁰⁸ During the last few decades, however, law schools merged the teaching of legal research with legal writing instruction under the guise that it could be taught properly only when paired with legal writing.²⁰⁹ Given the extent of criticism by members of the legal profession and the results of studies indicating that law graduates lack proficiency in legal research, it is safe to say that "giving responsibility of legal research instruction to legal writing faculty has [not] yielded the hoped for outcomes."²¹⁰

Research instruction in general is marginalized at most law schools. And legal research itself is complicated and involved, especially in today's digital world. Unfortunately, even when law librarians, the most qualified researchers at every law school, are part of a first-year research curriculum, they often play too minor a role. Research is an important skill, which should be taught by someone who is trained in research methodology and involved with legal research materials on a regular basis. With a current emphasis on incorporating more fundamental lawyering skills, like research, into the law school curricula,²¹¹ it is time to involve librarians in teaching these necessary skills and in developing research curricula.

At most law schools, Computerized Assisted Legal Research (CALR)²¹² is often taught by information vendors. Representatives from Westlaw and LexisNexis teach first-year law students about their respective databases. The reliability and training of these vendor representatives varies. They often overemphasize full-text searching of primary law at the expense of secondary sources and other important materials. This leads students to follow suit in their research assignments and to never fully appreciate the intricacies of doing comprehensive legal research. Librarians, not vendors, should teach CALR as part of a "comprehensive

206 We are not arguing that law librarians need to be the exclusive teachers of legal research but that they should be very involved in developing and regularly updating research programs and participate in the teaching if they desire. They should of course be appropriately compensated for this work.

207 Carol A. Parker, *How Law Schools Benefit When Librarians Teach, Hold Faculty Status, and Contribute to the Development of Curricula of Legal Research Instruction 8* (Univ. N.M. L. Lib., Working Paper, 2010) (available at <http://ssrn.com/abstract=1611235>).

208 *Id.* at 9.

209 *Id.* at 10.

210 *Id.*

211 *MacCrate Report, supra* n. 1, at 236–60; *Carnegie Report, supra* n. 1, at 14.

212 "Computerized Assisted Legal Research" refers to Westlaw and LexisNexis.

research program.”²¹³ Librarians can provide unbiased guidance, are informational professionals, add legitimacy to the research instruction, and will not represent CALR as a “quick and easy solution to legal research.”²¹⁴

Moreover, some librarians are eager to teach.²¹⁵ Librarians can be involved in research instruction and curriculum development in a number of ways. They could teach on their own or in conjunction with writing and doctrinal faculty. At Brooklyn Law School, several reference librarians work together with legal writing faculty, with clinical faculty, and with doctrinal faculty to teach individualized legal research classes. We regularly collaborate to develop research sessions for both first-year and upper-level students in drafting courses. Another example of collaboration is reference librarians’ creating research guides and posting web links to course web pages for faculty members.²¹⁶ Learning research from experts in the classroom or behind the scenes will be beneficial to our students and help to ensure that they graduate with heightened legal research skills and confidence in their researching abilities.

7. Law schools should offer specialized, advanced legal research courses.

As the practice of law becomes more specialized, so do the resources used to find and interpret the law.²¹⁷ Although the legal research process evolves slowly, the sources used and how they are accessed changes with each specialty. For example, civil litigators generally do not rely on the same sources as corporate practitioners. Law students today often come to school planning to practice in the area of environmental law, international-human-rights law or securities law. After their first year, many law students seek to explore these interests and enroll in subject-specific clinics or intern in a particular practice area. Often, these students are asked to conduct legal research that goes beyond their first-year training. To remedy this disconnect, law schools should offer specialized legal research courses. For example, during the summer semester, a series of

213 *Id.* Nevers, *supra* n. 60 at 764 (quoting Marilyn R. Walter, *Retaking Control Over Teaching Research*, 43 J. Leg. Educ. 569, 581 (1993)). “Vendors generally are more focused on teaching the technical mastery of CALR rather than how their system fits into legal research as a whole.” *Id.* at 764–65.

214 *Id.* at 768. Librarians have the training and credentials to more effectively teach legal research, it is important for students to develop a relationship with their librarians from the beginning of law school, and librarians instill in the students the importance of legal research training and skills. *Id.* at 767.

215 *Id.* at 766.

216 For a list of the research guides we developed at Brooklyn Law School, see Brook. L. Sch., *Welcome to Misguides*, <http://guides.brooklaw.edu> (accessed Mar. 14, 2011).

217 See Matthew C. Cordon, *Beyond Mere Competency: Advanced Legal Research in a Practice-Oriented Curriculum*, 55 *Baylor L. Rev.* 1, 31–34. (2003) (describing how specialized legal research instruction should demonstrate the range of tools and methods available to research distinct areas of law and how it should highlight patterns in research methods across a broad range of subjects).

one-credit, advanced legal research courses could be offered to support law students' summer employment. In response to student demand, we offer advanced legal research courses in Securities Law and in New York Civil Litigation at Brooklyn Law School. The professors of both courses also developed online research guides to support instruction.²¹⁸ We hope to continue and to expand this program in the future. Other examples of specialized research courses include International and Foreign Law Research or Administrative Law Research. The goal of this specialized instruction is to design courses that meet the needs and interests of the students to better prepare them for the practice of law.

By making changes in how legal research is taught, law schools will not only more effectively engage Millennial students but will also better prepare them for practice. This can be done by learning to use cost-effective resources and tools relied on by practitioners, encouraging students to work together on assignments (as would be expected of them in practice), and using timely topics being debated today in conference rooms and in courtrooms. These types of changes would address concerns of the bar and ready students for practice.

VI. Conclusion

It is time to heed the calls for legal education reform. In our changing economy, new attorneys need to be properly trained in law school to be competent at providing effective legal services for their employers and clients. Law schools must remain open to and interested in legal reform; they must partner with practitioners to incorporate more practical skills into the law school curriculum. Updating how we teach legal research by making it accord more with how attorneys actually conduct and use legal research in practice will help accomplish this and will also more actively engage our Millennial students. There is no question that making some timely changes to legal research instruction would better prepare new attorneys to be competent practicing lawyers and would be a win-win for students, law schools and employers.

²¹⁸ See e.g. Harold O'Grady, *Federal Securities Law Research Guide*, <http://guides.brooklaw.edu/federaalsecuritieslaw> (accessed Mar. 14, 2011); Kathleen Darvil, *New York Civil Practice: Selected Resources*, <http://guides.brooklaw.edu/newyorkcivil> (accessed Mar. 14, 2011).