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Law Firm Legal Research Requirements and the Legal Academy Beyond Carnegie

Patrick Meyer

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LAW FIRM LEGAL RESEARCH REQUIREMENTS
AND THE LEGAL ACADEMY BEYOND CARNEGIE

BY PATRICK MEYER *

I. INTRODUCTION

According to quantitative research conducted by Thomson West (now Thomson Reuters), new associate attorneys can expect to spend 45% of their time conducting research.¹ Yet despite this high percentage, criticism of the research abilities of new associates persists. Two seminal reports published in 2007, the Carnegie Report and Best Practices, concluded that law schools should better focus on preparing students for law practice.² This applies to legal research, which takes up so much of one's practice time.

There have been a handful of important recent studies on practice skills that post-date the Carnegie Report, and they are reviewed in this

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article. All of these studies support a stronger emphasis on legal research training in law schools, and all but one either suggest, or directly call for, an integrated approach where some tasks are taught in both the online and print formats. All but one of these studies surveyed practicing attorneys. The study most critical of new hire research abilities is a survey of law firm librarians. All of these studies show that legal academia must devote more time to teaching legal research, and all but one support my conclusions: that attorneys still use books to conduct research, book usage occurs much more than most people think, and law schools need to teach both online and print-based research for some tasks.

New attorneys frequently lack basic knowledge of how to use research resources, yet this knowledge is the link between legal research and legal analysis. Consequently, it is important to teach students basic usage before moving to more difficult material. This is time well spent since 45% of a new associate’s time is spent conducting research. As Best Practices states, “[i]t may not be possible to prepare students fully for the practice of law in three years, but law schools can come much closer than they are doing.” In short, law schools can do a better job at teaching legal research.

Part II of this article begins with a brief review of the history of legal research deficiencies in the law firm setting and progresses to a summary of several new studies on law firm research practices and abilities. Part II continues by summarizing the results of my 2010 law firm librarian survey, with some comparisons to my 2007 survey in order to detect patterns of research changes amongst one group over the past few years. Part II concludes with a discussion of which sources should be taught in an integrated manner according to my law firm librarian survey. In Part III, I propose a three-part plan to remedy the lack of research acumen amongst new attorneys. First, law schools must assure that all students receive an appropriate amount of basic research instruction in the first year curriculum, to include some print-based research instruction. Second, Advanced Legal Research must be a required course. Finally, I would like to renew the call to include a

5. BEST PRACTICES, supra note 2, at 5.
research component on each state’s bar exam.

II. THE NEED FOR RESEARCH-READY GRADUATES

A. HISTORY

The issues associated with legal research deficiencies in the law firm setting are long-standing. With the advent of the 1900s, it was noted that “[l]aw librarians who come daily in contact with experienced practitioners are frequently astonished at their ineptitude in using digests, tables of cases cited, and other labor-saving devices.” Early critics also complained that a “[l]ack of knowledge of law classification, [an] inability to comprehend the proper heading under which to look, and ignorance of the scope of the subject under consideration are serious handicaps for the lawyer whose time is money.” Not much had changed by 1990, when Howland and Lewis found that new associates were deemed by firm librarians to be deficient in digests, legal encyclopedias, and twelve other basic research sources, as well as in developing a research plan, using databases efficiently and cost-effectively, and in integrating online and print resources.

Attorneys who have been surveyed have similar concerns about the legal research abilities of their new hires. Law firm partners who participated in the Thomson West quantitative research noted that they want new hires to be proficient in print as well as online resources, but “associates are almost completely incapable of book research, unfamiliar with print resources, over-reliant on electronic resources, and arrive on the law firm scene with uneven skills and research capabilities.” Survey results showed that “70% of new researchers

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8. Id.


10. White Paper, supra note 1, at 3.
need help using print and online resources together” and that new attorneys could not “[e]ffectively and efficiently use print legal research materials . . . [p]roficiently use an index or table of contents . . . [o]r [u]nderstand key sources for specific practice areas.” A 2007 survey of Chicago area attorneys found that 14% of new attorneys are “seldom” or “never” able to conduct fee-based online research efficiently, and that 26% are “seldom” or “never” able to conduct print research efficiently.

There have been several important studies conducted over the years on practice skills on the whole, and three in particular are discussed here because they pertain to legal research. One of the watershed studies was the 1992 MacCrate Report, which contained the well-known Statement of Fundamental Lawyering Skills. Legal research was one of a handful of skills listed in the statement. On the heels of the MacCrate Report, the American Bar Association (“ABA”) addressed practice-ready deficiencies in their standards, eventually settling on the current language in Standards 301 and 302. Standard 301(a) now states that “[a] law school shall maintain an educational program that prepares its students for admission to the bar, and effective and responsible participation in the legal profession.” Standard 302(a)(2) reads: “(a) A law school shall require that each student receive substantial instruction in: . . . (2) legal analysis and reasoning, legal research.”

11. Id.
14. Id. at 138.
15. ABA Standards & Rules of Procedure for Approval of Law Schs. 2013-2014, 301(a)
Practices also call for more emphasis on practice skills development in the law school setting. By all accounts, preparing students to be effective legal researchers is a critical element in developing their practice-ready skills.

I will next summarize the most recent law firm skills surveys concerning legal research in order to determine if there have been any significant changes in the research requirements of new law firm associates since the Carnegie Report was published.

B. RECENT LEGAL RESEARCH SURVEYS OF ATTORNEYS

1. 2013 American Bar Association Legal Technology Survey Report

This highly esteemed work garnered 906 valid attorney responses for the Online Research Technology Questionnaires portion of the report. Respondents were asked how often they use print materials, free Internet/online services, and fee-based Internet/online services in the research process. The percentage of respondents who regularly or occasionally use print materials compares quite favorably to the use of free online services and even exceeds the percentage for fee-based online services:

- 40.9% regularly use print materials and 39.5% occasionally use print materials, for a combined total of 80.4%
- 59.6% regularly use free Internet/online services and 28.7% occasionally do so, for a combination of 88.3%

17. CARNEGIE REPORT, supra note 2, at 12-14, 188.
18. BEST PRACTICES, supra note 2, at 12-13.
20. Id. at V-ii.
21. Id. at V-23 (Question 18a).
22. Id. (Question 18c).
23. Id. at V-24 (Question 18d).
24. Id. at V-23 (Question 18a).
25. Id. (Question 18c).
63.2% regularly use fee-based Internet/online services and 19.9% occasionally do so, for a combination of 83.1%26

Law schools need to teach the formats that practitioners are likely to encounter in practice. The numbers directly above represent the most accurate account of format usage in practice, as opposed to questions that force respondents to choose the one most-often used format. When given a choice of which format is used ‘most often’ for a particular type of research, respondents are required to make one format choice regardless of whether they also regularly use another format. When given the more practical choice of which formats are used regularly, respondents are free to choose more than one format if appropriate, thus more accurately reflecting their research habits. However, this report also includes a series of these ‘most often used format’ questions. Respondents chose one of four formats (print, CD-ROM, online free, and online fee-based) that they most often use when conducting research in more than twenty various tasks.27 For easy comparison, the answers are shown side-by-side for the years 2010-2013.28 Although print-based research scores are relatively low for most of these topics, the question asks the respondent to restrict their answers to the one most often used format, even if they often use other formats.

This report clearly shows that both print and online formats are often used in the practice setting, as evidenced by responses to the more inclusive questions that were summarized in the bulleted list above.

2. A Study of the Newly Licensed Lawyer (NCBE)29

The purpose of this 2012 study that was conducted for the NCBE "was to describe the job activities of a newly licensed lawyer in

26. Id. at V-24 (Question 18d).
27. Id. at V-xiii.
28. Id. at V-xiii to V-xv.
sufficient detail to provide a job-related and valid basis for the
development of licensing examinations offered by NCBE. The
breakdown of respondents by years of practice show that 1145 were in
practice between one and three years, 221 were in practice less than
one year, and thirty respondents had been in practice over three
years. This survey was quite selective: activities were excluded from
the survey results summary if not performed by at least 50% of the
respondents and also if tasks scored a mean rating lower than 2.0 on a
scale of 0 to 4.

The ‘General Tasks’ section of Appendix I shows forty-one tasks
that rated at a 2.0 mean or better (out of 4), and several research tasks
appear therein:

- Electronic legal research is the fourth highest rated task
  (3.42 mean)
- Statutory authority research — seventh highest rated task
- Regulations and rules research — ninth highest rated task
- Judicial authority research — 12th highest rated task
- Secondary authorities research — 25th highest rated task
- Legislative histories research — 38th highest rated task

Research also scores well in the ‘Knowledge Domains’ section of
Appendix I. Out of the eighty-six highest scoring ‘knowledge
domains,’ Research Methodology is the fifth most important, with an
average significance of 2.91 out of 4. In the ‘Skills and Abilities’
section of Appendix I, Electronic Research is the 19th highest and
Non-Electronic Research is the 36th highest out of scores of practice
skills.

This report clearly shows that legal research is a critical practice
skill. Non-Electronic Research was also listed in Appendix I, thus
indicating (given the selectivity of this survey) that it is also important

30. Id. at 1.
31. Id. at 13 (Figure 3).
32. Id. at 17-18.
33. Id. at 303.
34. Id. at 312-14.
35. Id. at 313.
36. Id. at 314.
in the practice setting.

3. A Study of Attorneys' Legal Research Practices and Opinions of New Associates' Research Skills (ALL-SIS)\textsuperscript{37}

This 2013 report was prepared by a special interest section of the American Association of Law Libraries, and identifies "the current and future research skills that law school graduates need to succeed in legal practice."\textsuperscript{38} Approximately 600 usable responses were collected.\textsuperscript{39} The percentage of respondents by office size were as follows:\textsuperscript{40}

- 18.71% solo practitioners
- 25.3% between 2-5 attorneys
- 11.7% between 6-10 attorneys
- 11.1% between 11-20 attorneys
- 8.5% between 21-50 attorneys
- 31.9% over 50 attorneys

The percentage of respondents by years of practice was as follows:\textsuperscript{41}

- 22% were in practice for 4 years or less
- 17% from 5-9 years
- 25% from 10-19 years
- 19% from 20-29 years
- 17% for 30+ years

This report notes the following findings about print-based research\textsuperscript{42}:

- 42.3% of all respondents use print materials frequently (26.9%) or very frequently (15.4%)

\textsuperscript{38} Id. at 1.
\textsuperscript{39} Id. at 5.
\textsuperscript{40} Id. (Figure 1).
\textsuperscript{41} Id. at 7 (Figure 2).
\textsuperscript{42} Id. at 30.
• 33.9% use print materials ‘occasionally’
• A statistical analysis shows “a weak but statistically significant positive relationship between years of experience and frequency of using print resources. Overall, across all subgroups, the frequency of using print materials increased as the number of years in practice increased.”

Other results include:
• 47.3% of respondents spend “up to 15%” of their time per week on research. 10.3% allocate at least half of their time researching. 14.8% of respondents with 0-4 years of experience spend 50%-75% of their time researching, which expectedly is a much higher percentage than for all other experience categories.43
• 14% ‘frequently’ consult a case digest or equivalent to find a topic and key number, and 21% ‘occasionally’ do so. On the other hand, 59.5% ‘never’ or ‘rarely’ do so.44
• 10.9% ‘very frequently’ use headnotes and key numbers in a case to find other relevant cases, 21.4% do so ‘frequently,’ and 24.1% ‘occasionally’ do so (56.4% combined). 43.6% of respondents either ‘never’ or ‘rarely’ use the headnotes or key numbers.45
• 19.4% ‘very frequently’ use an index or table of contents, 33.2% do so ‘frequently,’ and 28.6% do so ‘occasionally’ (81.2% combined). 18.9% ‘never’ or ‘rarely’ do so.46
• 19.7% of respondents ‘very frequently’ follow citations in an annotated code, 32.7% do so ‘frequently,’ and 27.4% do so ‘occasionally’ (79.8% combined). 20.3% either ‘never’ or ‘rarely’ do so.47
• 27.2% of respondents either ‘very frequently’ or ‘frequently’ utilize treatises, 33.7% do so ‘occasionally’

43. Id. at 8-9 (Figure 3).
44. Id. at 21 (Figure 17).
45. Id. at 22 (Figure 18).
46. Id. at 26 (Figure 22).
47. Id. at 29 (Figure 25).
(60.9% combined), whereas 39% 'never' or 'rarely' do so. The frequency of using treatises increases with years of experience.\textsuperscript{48}

- On the other hand, only 8.2% of respondents either 'very frequently' or 'frequently' use looseleaf services, and 18.1% 'occasionally' do so (26.3% combined). 40.3% 'never' use looseleafs and 33.3% 'rarely' do so.\textsuperscript{49}

- 37.3% of respondents 'very frequently' 'frequently,' or 'occasionally' use digests. 62.7% either 'never' or 'rarely' use digests. There is a weak but statistically significant relationship between years of practice and increased use of digests.\textsuperscript{50}

- Only 23.8% of respondents use Lexis Advance.\textsuperscript{51} 49.5% of respondents use WestlawNext.\textsuperscript{52}

This survey rated the research skills of recent graduates as such:

- Only 19.8% of the 253 respondents state that new associates develop an effective research plan at an unacceptably or poor level.\textsuperscript{53}

- Only 26.2% of the 240 respondents believe that new associates do not use secondary sources efficiently (unacceptable or poor). 29.6% feel that they do so moderately or very well and 44.2% find their usage of secondary sources to be adequate.\textsuperscript{54}

- 87% of respondents state that new hires develop appropriate research strategies (very well, moderately well, or adequately).\textsuperscript{55}

- Over 90% rate case law research abilities of new associates as at least adequate.\textsuperscript{56}

\textsuperscript{48} Id. at 35.
\textsuperscript{49} Id. at 51 (Figure 47).
\textsuperscript{50} Id. at 42 (Figure 38).
\textsuperscript{51} Id. at 73 (Figure 70).
\textsuperscript{52} Id. at 74 (Figure 72).
\textsuperscript{53} Id. at 77 (Figure 76).
\textsuperscript{54} Id. at 78 (Figure 77).
\textsuperscript{55} Id. at 80 (Figure 79).
\textsuperscript{56} Id. at 81.
• 88% believe that the ability of new associates to conduct statutory research is at least adequate.  

• 70.8% feel that the ability of new associates to conduct regulation research is at least adequate.  

• Out of 231 respondents, 37.7% find that new associates perform cost-effective research either at an unacceptable or poor level. 28% feel new associates do so at either a very well or moderately well level.  

• 83.5% believe that the ability of new associates to use Westlaw is at least adequate.  

• 81.3% rate the ability of new associates to use Lexis is at least adequate.  

What makes these results intriguing and reliable is that a large percentage of the approximately 600 respondents have practiced for several years and have likely developed refined research skills. Although these experienced practitioners acknowledge this research problem, they do not feel that it is as large of a research problem as others (like law firm librarians) do. Like the ABA Legal Technology Survey Report, this report clearly shows that both print and online formats are often used in the practice setting.

4. Rebooting Legal Research in a Digital Age

In this 2013 article, Steven Lastres, Director of Library & Knowledge Management for Debevoise & Plimpton LLP, summarizes a survey of 190 law firm associates that was funded by LexisNexis. "Nearly forty percent of the respondents were 28 or younger, in practice for five or less years, and a quarter of the respondents were recent law school graduates from the class of 2011 or 2012." Lastres

57. Id. at 82 (Figure 81).
58. Id. at 83 (Figure 82).
59. Id. at 88.
60. Id. at 89 (Figure 88).
61. Id. at 90 (Figure 89).
63. Id. at 1.
draws conclusions from the survey results. The underlying survey, titled *New Attorney Research Methods Survey*, is much smaller than the other three recent surveys discussed above (albeit similar in size to my law firm librarian survey) and largely includes respondents who are likely in the process of learning how to properly research and how to refine their research skills.

Results of the survey, and Lastres’ conclusions, include the following:

- New attorneys spend on average 14.5 hours per week conducting research, of which 7.7 hours are on paid online services, 4.5 hours are on free or low-cost online services, and 2.1 hours are in the print format. Only slightly more than one-seventh of their research time is spent using print format.\(^{64}\)

- Survey results show that two-thirds of all respondents used the legal classification system available in a digest or jurisprudence at some point in their case law research process.\(^{65}\) One-third usually do not access a legal classification system at all.\(^{66}\) Lastres concludes that “[T]he widespread practice of not using a legal classification system implies that law schools may need to adapt how they teach legal research to better align with methods attorneys actually use in practice.”\(^{67}\)

- 49% of respondents feel that they should have been offered more research training in law school.\(^{68}\)

Lastres uses results of this survey to call for updating the law school research curriculum “by adjusting the time allocated for hard copy vs. online research.”\(^{69}\) The assumption is that most of us who conduct print-based research training spend an inordinate amount of time doing so. I incorporate print-based components into my Advanced Legal Research course and doing so takes only about five percent of

\(^{64}\) *Id.* at 3.
\(^{65}\) *Id.* at 5.
\(^{66}\) *Id.* at 5, n.1.
\(^{67}\) *Id.* at 5-6.
\(^{68}\) *Id.* at 6.
\(^{69}\) *Id.* at 7.
my class time, as teaching the mechanics of print-based research involves few steps.

Lastres notes that law schools should reduce their "emphasis on legal classification systems." He apparently bases that comment on the fact that one-third of the new attorneys in this survey did not use the legal classification system (although two-thirds did use the system at some point in their research process).

Some questions persist after reading this article. Do we forego print-based training simply because these new hires, who are likely in the process of figuring out how to best conduct research, prefer the online environment? What is our responsibility in preparing our students for practice? Is not what Lastres suggests similar to a contracts or property professor teaching only the law that her students want to be taught?

All of these recent surveys, except the one funded by LexisNexis, support the teaching of a print-based research component. The respondents in all of these surveys are practicing attorneys. How would the answers change if the respondents were firm librarians, who often have many years of experience to draw from, and who, on average, spend much more time conducting research than the average practitioner? To answer this question, I will turn to my recent survey of law firm librarians.

C. THE 2010 LAW FIRM RESEARCH SURVEY OF LIBRARIANS

In 2010, I solicited participation for my survey on the American Association of Law Library (AALL) Private Law Libraries Special Interest Section (PLL-SIS) Listserv. My e-mail invitation to the largest law firm librarian list included a link to a SurveyMonkey survey. The survey consisted of seventeen questions, most of which provided lists of answer choices for ease of use. Check boxes were used for questions that allowed for multiple answers. Radio buttons were used for questions that had only one answer. When appropriate, questions also contained text boxes so all comments and explanations were captured. Firm librarians were chosen for their research expertise.

70. Id.
72. See infra Appendix A.
and because they often work directly with new hires throughout their research projects. 74

Of the 165 valid responses, the breakdown by firm size was as follows:

- 1-25 attorneys: 9 respondents
- 26-50 attorneys: 23 respondents
- 51-100 attorneys: 46 respondents
- 101-200 attorneys: 47 respondents
- Over 200 attorneys: 40 respondents

As there were only nine respondents from the 1-25 attorney category, those results are not individually summarized in this article.

1. Respondent Comments

Respondents were asked to share comments or concerns about the level of legal research skills they observe of new hires in their firms. Respondents described several deficiencies, ranging from not being able to identify the most useful materials in particular areas of law, not performing cost-effective research, an inability to effectively use print resources, and not using online and print resources in an integrated manner. Several respondents called for a mandatory Advanced Legal Research course in law schools. What follows are some representative, albeit sobering, comments 75:

- “Most summers and first years arrive at [our] law firm woefully unprepared.”
- “Our partners are concerned that new lawyers don’t know about the seminal treatises in particular areas of law. This

73. See Terry Carter, The New Law Librarian, 90 A.B.A. J. 34, 34 (July 2004) (Firm librarians are often billed at $80-$160 dollars per hour for their research expertise.); AM. LAWYER ONLINE, LAW LIBRARIAN SURVEY 2010 – STAFFING / YEAR IN REVIEW (2010), available at LexisNexis. The 2010 median hourly rate for librarians in AmLaw 200 firms was $150, suggesting a high level of trust and research expertise. Id.

74. Howland & Lewis, supra note 9, at 382. Librarians often work closely with the new hires throughout their research projects, whereas senior associates or partners often only see the polished final product and are thus not able to properly assess their research acumen. Id.

75. See infra Appendix B. All comments that follow, and more, can be found in Appendix B.
lack of knowledge makes the partners question the quality of research. If you are unfamiliar with an area of law, start with treatises.”

- “PLEASE teach them to be cost-aware. Please teach them to ask questions, and not just dive into expensive research as if it were Google!”

- “I wish there was some consistency about what was taught at all law schools. I wish there was a requirement for an advanced legal research class. I wish they were taught to use a mix of online & print resources. I wish they didn’t think everything was ‘online’ & it was all free.”

- “Future legal research training courses should provide a mix of online and print, demonstrating the value of both formats. Legal research courses in law schools should be required in year one but carry as much credit power as any other legal course work in law school. In years two and three, perhaps students should be required to complete a legal research exam (searching for answers in the library and online) to demonstrate that their research skills are improving as they complete each year of law school.”

- “Advanced Legal Research should be a required course. Law students need more in-depth instruction in how to use loose-leaves, in the legislative process and how to interpret a legislative history; more instruction in how to do regulatory research and regulatory history... how to combine print and online research for more cost-effective and substantively effective results. It would be helpful if when doing research tasks in a course, that law students keep track of ‘billable’ hours and get some kind of pro-forma estimate of what the online charges would have been... Emphasize that firms now want not only cost recovery, but cost prevention and predictability, and that good research skills are very important to this.”

- “Books! They tend to waste time poking around online when they could have easily and efficiently found the answers if they used the state practice series.”
• "Almost every new associate comes to the firm wanting to look for cases. But half the time cases aren’t the answer and, even when they are, the best way to start looking for cases is usually using another resource—treatises or articles especially. Also digests, annotated codes, etc."

• "Any instruction that stresses the importance of planning a research activity and the importance of considering all research resources before starting a research activity should produce positive results for anyone attempting to perform cost effective legal research."

• "I believe law students should at least be introduced to online research costs while in school, and [should be taught] a course on how to conduct a search. I see way too many instances of kids fresh out of law school taking what I call the ‘shotgun approach’ to legal research where they just fire away (run searches) until they hit something."

• "The main problem I see with new attorneys is that they don’t consult treatises or encyclopedias before resorting to case law . . . . It behooves them to be familiar with the law via a wealth of treatises before they dive into case law."

• "There is very little support to train new lawyers on research even though they need it."

• "Main concern: young lawyers are coming out of school with very little knowledge of research and sources; a shocking tendency to want to ‘Google’ everything; a reflexive desire to jump right online for every research issue; simply not realizing how useful a book can be, to introduce you to a topic and to find answers without reinventing the wheel—whatever your issue, someone else has probably already covered it, and if they haven’t, that sets your expectations about the probable paucity of info you’re going to find online as well."

• "New associates are deficient in print research. They need to have an understanding of how the print resources work before they try to use them online. Also, they are lacking
basic knowledge of what are statutes vs. regulations; digests and the Key number system ... they don't know how to use tables of contents or indices in print resources.”

2. *Survey Results*

a. Most Important Research Tasks

Firm librarians identified the most important research tasks that entry-level attorneys must know how to perform:

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<tr>
<td>Case law research</td>
<td>95.7%</td>
<td>87%</td>
<td>93.5%</td>
<td>83.8%</td>
<td>89.4%</td>
</tr>
<tr>
<td>Cost-effective research</td>
<td>82.6%</td>
<td>91.3%</td>
<td>87%</td>
<td>91.9%</td>
<td>86.9%</td>
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<tr>
<td>Secondary source research</td>
<td>69.6%</td>
<td>76.1%</td>
<td>80.4%</td>
<td>89.2%</td>
<td>78.8%</td>
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<tr>
<td>Citator services</td>
<td>82.6%</td>
<td>71.7%</td>
<td>78.3%</td>
<td>83.8%</td>
<td>78.1%</td>
</tr>
<tr>
<td>Legislative code research</td>
<td>73.9%</td>
<td>73.9%</td>
<td>58.7%</td>
<td>59.5%</td>
<td>65%</td>
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<tr>
<td>Document retrieval by citation</td>
<td>69.6%</td>
<td>60.9%</td>
<td>50%</td>
<td>56.8%</td>
<td>58.1%</td>
</tr>
<tr>
<td>Administrative code research</td>
<td>47.8%</td>
<td>47.8%</td>
<td>45.7%</td>
<td>48.6%</td>
<td>46.3%</td>
</tr>
<tr>
<td>Digest research</td>
<td>34.8%</td>
<td>52.2%</td>
<td>32.6%</td>
<td>51.4%</td>
<td>41.3%</td>
</tr>
<tr>
<td>Legislative history research</td>
<td>43.5%</td>
<td>23.9%</td>
<td>17.4%</td>
<td>21.6%</td>
<td>23.8%</td>
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</table>

A few details gleaned from respondent answers above, or from their comments, are worth mentioning.

First, several sources in the table may not be the focus of the traditional first year of law school. Those sources are: cost-effective research, secondary source research, administrative code research, digest research, and legislative history research. Other notable
observations follow:

(1) Cost-effective research

Not only did cost-effective research score high as a most important task, but my 2010 survey asked this additional question: “Based on your experience, cost effective research is usually accomplished best under which circumstance?” Out of 156 total responses, ninety chose “[w]ith a relatively even combination of online & print research.” The second most plentiful answer was “[b]y a combination of both, but mostly online,” with forty-six tallies. These results, corroborated by the ABA Legal Technology Survey Report and the ALL-SIS Study, support the integrated teaching approach. These results also underscore the need to teach cost-effective research strategies in both print and online formats.

These are typical responses to the reasons for excessive online costs:

- Inadequate preparation before logging into a database
- Not realizing the value to using print resources or even that they are available
- Not understanding the firm’s online research plans and their limits
- Not being aware of costs incurred by clicking on hyperlinks
- Not being aware of low cost research alternatives to online researching
- Lack of research training
- Poorly constructed search queries/failure to understand

76. Infra Appendix A (2010 Legal Research Questionnaire, Question 11).
78. Id.
79. ABA LEGAL TECHNOLOGY SURVEY REPORT, supra note 19, at V-xiii to V-xv, V-23, V-24.
80. See generally ALL-SIS Study, supra note 37. The results of this extensive study suggest that new attorneys should be familiar with both online and print methods of research.
81. See infra Appendix C (respondent comments regarding excessive research costs).
proper search techniques

Law firms absorb much of the cost of excessive or sloppy research. Results from a 2013 annual survey of law firm library directors shows that 33% of firms recover only 40% or less of research costs from their clients. Additionally, a recent survey found that 69% of law firms had clients who refused to pay for online research costs. The extent to which research costs are recovered is a source of friction between the firm and the client. The extent to which the firm eats the costs of online research is a source of friction between the firm and the researcher.

Cost-effective research must be stressed in law school, and can be done through a combination of lectures, demonstrations, quizzes and assignments. Some examples of how to achieve this include:

- Lecturing students on the typical structure of pricing plans, and making sure students understand at exactly what points in the research process they may be charged. Students also need to know how much a practitioner is typically charged for research within each plan. Work with the vendors to secure approximate costs.
- Following the pricing plan lecture with the administration of a mid-semester pricing quiz and/or e-poll.
- Affixing a cost for research conducted as part of class demonstrations and in-class assignments. Check with vendors for pricing information.
- Adding a timesheet component to a research log as part of take-home assignments, which in conjunction with the cost list provided by the vendors gives you another opportunity to affix costs to student work.


(2) Secondary sources

The number of respondents choosing secondary sources as a most important research task increased by 8.5% over a similar survey that I conducted in 2007.\textsuperscript{84} Unfortunately, respondent and practitioner comments mentioned above strongly suggest that new hires are weak in conducting secondary source research. Conducting secondary source research is not a strength of new hires.\textsuperscript{85} This is disturbing because of the connection between secondary sources and cost-effective research. One respondent summed it up nicely, stating that the reason for excessive online charges is not realizing “that they need some background understanding of the area they are to research, typically from secondary sources, to craft an appropriate search string. Without that background, they don’t know the concepts they need to cover or the synonyms/alternate phrasing that courts use to discuss the concepts.”\textsuperscript{86} Thus, academics should stress the importance of secondary source research.

(3) Digest research

The high percentage for digest research (41.3% feel it was a ‘most important’ research task) means that it should be a component of research courses. It is often easier to teach students the concept of digest searching by first introducing them to the print digests.\textsuperscript{87}

\textsuperscript{84} Compare supra Table 1, with Meyer, supra note 6, at 312.
\textsuperscript{85} See supra Part II.C.1.
\textsuperscript{86} Infra Appendix C, p. 119.
\textsuperscript{87} Meyer, supra note 6, at 313.
b. Online Resources

The prior section identified the most important research tasks regardless of format. This section and the next section will identify in which format or formats they should be taught.

(1) Tasks usually conducted online

<table>
<thead>
<tr>
<th>Table 2: What Research Tasks Should Usually Be Conducted Online?</th>
</tr>
</thead>
<tbody>
<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>Citator services</td>
</tr>
<tr>
<td>Case law research</td>
</tr>
<tr>
<td>Document retrieval by</td>
</tr>
<tr>
<td>citation</td>
</tr>
<tr>
<td>Administrative code</td>
</tr>
<tr>
<td>code research</td>
</tr>
<tr>
<td>Digest research</td>
</tr>
<tr>
<td>Legislative code</td>
</tr>
<tr>
<td>research</td>
</tr>
<tr>
<td>Legislative history</td>
</tr>
<tr>
<td>research</td>
</tr>
<tr>
<td>Secondary source research</td>
</tr>
</tbody>
</table>

All but one listed task in Table 2 show a percentage increase as compared to my 2007 survey.\(^{88}\) Besides case law research (up 13.8%), all gains were minimal.\(^{89}\) This suggests that there has not been a major shift away from using print resources.

Interestingly, although nearly 80% of respondents indicate that case law research should be conducted online, only 24.4% feel that

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\(^{88}\) Compare supra Table 2, with Meyer, supra note 6, at 317.

\(^{89}\) Compare supra Table 2, with Meyer, supra note 6, at 317.
digests, which are the case law finding aids, should usually be used online.

(2) Must know online services

For the purpose of properly allocating scarce class time, it is important to identify the 'must know' databases:

Table 3: What Databases Must New Attorneys Know How To Use In Your Office?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Westlaw</td>
<td>87%</td>
<td>93.5%</td>
<td>84.4%</td>
<td>92.3%</td>
<td>89.4%</td>
</tr>
<tr>
<td>LexisNexis</td>
<td>69.6%</td>
<td>76.1%</td>
<td>84.4%</td>
<td>84.6%</td>
<td>78.9%</td>
</tr>
<tr>
<td>Pacer</td>
<td>39.1%</td>
<td>19.6%</td>
<td>35.6%</td>
<td>25.6%</td>
<td>28.6%</td>
</tr>
<tr>
<td>RIA CheckPoint</td>
<td>17.4%</td>
<td>6.5%</td>
<td>20%</td>
<td>20.5%</td>
<td>14.9%</td>
</tr>
<tr>
<td>CourtLink</td>
<td>4.3%</td>
<td>4.3%</td>
<td>15.6%</td>
<td>17.9%</td>
<td>10.6%</td>
</tr>
<tr>
<td>LivEdgar</td>
<td>8.7%</td>
<td>2.2%</td>
<td>15.6%</td>
<td>10.3%</td>
<td>8.7%</td>
</tr>
<tr>
<td>LoisLaw</td>
<td>4.3%</td>
<td>2.2%</td>
<td>8.9%</td>
<td>7.7%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Dun &amp; Bradstreet</td>
<td>0%</td>
<td>2.2%</td>
<td>0%</td>
<td>0%</td>
<td>.6%</td>
</tr>
<tr>
<td>ChoicePoint</td>
<td>0%</td>
<td>0%</td>
<td>2.2%</td>
<td>0%</td>
<td>.6%</td>
</tr>
</tbody>
</table>

Aside from Westlaw and LexisNexis, no other database totaled 30% (combined totals), which makes the decision of whether to provide additional database training a difficult one. These totals have been consistent through all three survey administrations. Because of the low percentages, I devote only one class in my Advanced Legal Research course (one out of thirteen classes; 100 minutes per class) to Pacer, CourtLink and West Dockets (West Dockets was mistakenly left off of the survey). I do not include CheckPoint, as its focus is outside the scope of my course. I rarely include subscription databases in 1L legal research training, aside from Westlaw and Lexis. I do not think it would be wise to do so given both the low percentages for the other databases and because there is a lot of basic research material for students to master in their first year. However, (although not a focus of
this article) I should mention that I teach a host of free, official legal websites in my Advanced Legal Research course, and have introduced the same to ILs if the opportunity availed itself.

c. Print Resources

(1) Tasks usually conducted in print

We can better understand which print-based components to include in our research training by identifying the tasks that are usually expected to be performed in the print format.\(^9\) This information will allow us to address the long-standing complaint that many new hires do not know how to use print resources or their components.\(^9\) Experts feel that this deficiency takes on great significance because print resources are visibly ordered around legal concepts, whereas online research is not.\(^9\) The reader must follow the concept-based structure of

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\(^9\) In addition to knowing which tasks to teach in the print format, one must understand the advantages and disadvantages of print-based (and online) research. See Patrick Meyer, *Think Before You Type: Observations of an Online Researcher*, 13 PERSPS.: TEACHING LEG. RES. & WRITING 19, 19-20 (2004) (Meyer acknowledges the advantages of proper online research, as well as proper print research, while also discussing some alarming pitfalls that await the unsuspecting neophyte online researcher. Additionally, Meyer conducted an exhaustive analysis of what secondary source looseleaf titles are found in print that are not found either in Westlaw or Lexis.); Meyer, supra note 6, at 314-16; Emily Marcum, *The Cognitive Disadvantages of E-Books*, 17 AM. ASS'N OF L. LIBR. SPECTRUM 26, 26 (Nov. 2012) (citing to a study that stated “[r]ead ing text onscreen takes 20 to 30 percent more time than reading text on paper” and that “[s]creen reading was found to cause more stress and exhaustion and require more effort than paper reading”); Maia Szalavitz, *Do E-Books Make it Harder to Remember What You Just Read?*, Time.com (Mar. 14, 2012), http://healthland.time.com/2012/03/14/do-e-books-impair-memory/print/ (noting that one study found “more repetition was required” for online readers to learn information versus book researchers and that the book research subjects “seemed to digest the materials more fully”); Jocelyn Stilwell-Tong, *Generational Divides: Paper and Electronic Resources*, AALL/ILTA White Paper 54, 57 (Oct. 2012), http://read.uberflip.com/l/87421 (“[S]ome resources are still simply better in print – more easily absorbed, easier to read and easier to cross-reference. It’s easier to understand spatial relationships in print sources. For instance, the length of a chapter or how much of a treatise is devoted to one subject.”).  

\(^9\) *Infra Appendix C passim.*

\(^9\) Yasmin Sokkar Harker, *“Information is Cheap, but Meaning is Expensive”*: *Building Analytical Skill into Legal Research Instruction*, 105 LAW LIBR. J. 79, 83-84 (2013).
the materials when performing print research in order to retrieve relevant documents (internalizing the structure over time). For instance, a code set is organized by legal topic. The accompanying tables of contents and indices are organized into subtopics, with each section of the code fitting into that structure. One has to work through the structure in order to find relevant research. The development of these skills can easily be bypassed in the online environment where one quick keyword search can retrieve many documents, and where context is lacking. Online research all too easily becomes fact-based instead of concept-based,93 impeding "students' ability to see the broad legal principles that apply to their legal issues."94 Being able to identify how a resource is structured is a crucial process to master, and it is a more intuitive process in the print medium.95 It is only after one masters the basics that it is possible to advance to the more complex aspects of legal research, as mentioned in the MacCrate Report: “[D]iagnosis of the problem; identification of the range of possible solutions; development of a plan of action; and implementation of the plan.”96

What follows is the breakdown of tasks that law firm librarian respondents feel should usually be conducted in books:

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94. Harker, supra note 92, at 84 (citing Valentine, supra note 3, at 195-97).
95. See Matthew C. Cordon, Task Mastery in Legal Research Instruction, 103 LAW LIBR. J. 395, 404 (2011).
96. MACCRATE REPORT, supra note 13, at 163.
Table 4: What Research Tasks Should Usually Be Conducted in Books?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary source research</td>
<td>63.6%</td>
<td>80%</td>
<td>78%</td>
<td>86.1%</td>
<td>76.7%</td>
</tr>
<tr>
<td>Digest research</td>
<td>50%</td>
<td>46.7%</td>
<td>36.6%</td>
<td>38.9%</td>
<td>41.3%</td>
</tr>
<tr>
<td>Legislative code research</td>
<td>22.7%</td>
<td>42.2%</td>
<td>31.7%</td>
<td>38.9%</td>
<td>36%</td>
</tr>
<tr>
<td>Legislative history research</td>
<td>50%</td>
<td>42.2%</td>
<td>34.1%</td>
<td>25%</td>
<td>35.3%</td>
</tr>
<tr>
<td>Administrative code research</td>
<td>13.6%</td>
<td>24.4%</td>
<td>7.3%</td>
<td>25%</td>
<td>18.7%</td>
</tr>
<tr>
<td>Case law research</td>
<td>9.1%</td>
<td>2.2%</td>
<td>2.4%</td>
<td>5.6%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

Although legislative code research is the third highest choice for this question (36%), it fell over 22% from my 2007 survey, which makes the format choice for this task worthy of being closely watched in subsequent survey administrations.

Only 4.7% of all respondents believe case law research should usually be conducted using books, although 89.4% of all respondents identified it as a most important task (Table 1). In contrast, 79.4% of all respondents feel this type of research should usually be conducted online (Table 2).

The percentages in Table 4 show a significant decline from the 2007 survey for tasks that should usually be conducted in books, whereas the percentages in Table 5 were higher for nearly every print 'must know' resource. Therefore, even though print research tasks are becoming increasingly necessary to master, these tasks should more often be conducted online. Perhaps this reflects the belief that the key to research mastery is first learning legal concepts, which is

97. Compare supra Table 4, with Meyer, supra note 6, at 316.
98. Compare supra Table 4, with Meyer, supra note 6, at 316.
99. Compare infra Table 5, with Meyer, supra note 6, at 315.
accomplished easier in print.\textsuperscript{100} Another possible explanation is that, although print resources may not be the first choice, attorneys still use books on a regular basis and therefore need to know how to use them. This is supported by the results of the \textit{ABA Legal Technology Survey Report} and the \textit{ALL-SIS Study}.\textsuperscript{101} However, I may have simply caught the firm librarians in the midst of a developing attitude shift regarding print versus online research; and if so, subsequent administrations of this survey should bear this out.

\textbf{(2) Must know print-based research sources}

Although it is useful to identify the tasks that should usually be performed using books (Table 4), understanding which print-based sources new hires must be familiar with (Table 5) is more useful in determining which particular print sources to teach. The latter caters to the possibility that a source may be regularly used in both the online and print formats; and even if a source is usually used in the online format, there are instances when one finds it beneficial or even necessary to use the print format. Thus, Table 5 shows that there were nine research tasks chosen by at least 40\% of respondents, as opposed to only two such research tasks in Table 4. Here are the full results:

\textsuperscript{100} \textit{See} Valentine, \textit{supra} note 3, at 189-91, 193, 195, 204-05.
\textsuperscript{101} \textit{See supra} Part II.B.1, 3.
Table 5: What Print-Based Sources Must New Attorneys Know How to Perform?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Your state's legislative code</td>
<td>57.1%</td>
<td>70.5%</td>
<td>80.5%</td>
<td>71%</td>
<td>70.1%</td>
</tr>
<tr>
<td>Federal secondary sources</td>
<td>76.2%</td>
<td>68.2%</td>
<td>75.6%</td>
<td>67.7%</td>
<td>68.8%</td>
</tr>
<tr>
<td>Your state’s secondary sources</td>
<td>57.1%</td>
<td>61.4%</td>
<td>78%</td>
<td>67.7%</td>
<td>66%</td>
</tr>
<tr>
<td>Federal legislative codes</td>
<td>57.7%</td>
<td>65.9%</td>
<td>63.4%</td>
<td>67.7%</td>
<td>62.5%</td>
</tr>
<tr>
<td>Your state’s administrative code</td>
<td>38.1%</td>
<td>50%</td>
<td>68.3%</td>
<td>58.1%</td>
<td>54.9%</td>
</tr>
<tr>
<td>Federal administrative code</td>
<td>38.1%</td>
<td>54.5%</td>
<td>46.3%</td>
<td>58.1%</td>
<td>49.3%</td>
</tr>
<tr>
<td>Your state’s digest</td>
<td>38.1%</td>
<td>50%</td>
<td>46.3%</td>
<td>58.1%</td>
<td>47.2%</td>
</tr>
<tr>
<td>Federal reporters</td>
<td>57.1%</td>
<td>38.6%</td>
<td>39%</td>
<td>51.6%</td>
<td>43.8%</td>
</tr>
<tr>
<td>Your state’s reporters</td>
<td>52.4%</td>
<td>38.6%</td>
<td>39%</td>
<td>54.8%</td>
<td>43.1%</td>
</tr>
<tr>
<td>Federal digests</td>
<td>28.6%</td>
<td>38.6%</td>
<td>39%</td>
<td>48.4%</td>
<td>38.2%</td>
</tr>
<tr>
<td>Your state’s administrative law decisions</td>
<td>14.3%</td>
<td>15.9%</td>
<td>19.5%</td>
<td>29%</td>
<td>19.4%</td>
</tr>
<tr>
<td>Regional reporters</td>
<td>19%</td>
<td>18.2%</td>
<td>7.3%</td>
<td>32.3%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Federal administrative law decisions</td>
<td>14.3%</td>
<td>11.4%</td>
<td>9.8%</td>
<td>22.6%</td>
<td>14.6%</td>
</tr>
</tbody>
</table>
Seven of the thirteen listed tasks saw a percentage increase from my 2007 survey.\textsuperscript{102}

Not only is secondary source research the third most important research task regardless of format,\textsuperscript{103} it also has the second (federal) and third (your state's) highest percentages in this table, with about two out of three respondents choosing secondary sources. Federal secondary source research rose 16.2% above the 2007 survey and 'Your state's secondary source research' increased by 14.7%.\textsuperscript{104} The totality of these percentages further supports a need to emphasize secondary source research in law schools.

The percentages for administrative code research suggest format uncertainty. On the one hand, the Table 5 score for 'Your state's administrative code research rose 8.8% from the 2007 survey,\textsuperscript{105} and administrative code research rose 12.8% as a most important research task (Table 1).\textsuperscript{106} On the other hand, administrative code research declined 15.8% for the 'usually conducted in books' question (Table 4).\textsuperscript{107} In spite of that, the online totals (Table 2) have not risen significantly.\textsuperscript{108} These percentages are worth watching in the next survey.

Legislative code research also scored quite high in this table, and it also rose sharply (11.8%) as a 'most important research task' (Table 1) from the 2007 percentages.\textsuperscript{109} However, legislative code research fell 22.1% for the 'usually conducted in books' question.\textsuperscript{110}

Federal case law research (federal reporters) fell by 10.1% as a 'must know in print' task to 43.8%,\textsuperscript{111} while also losing 12.2% for the 'usually conducted in books' question (Table 4) from the 2007 survey.\textsuperscript{112}

\textsuperscript{102} Compare supra Table 5, with Meyer, supra note 6, at 315.
\textsuperscript{103} See supra Table 1.
\textsuperscript{104} Compare supra Table 5, with Meyer, supra note 6, at 315.
\textsuperscript{105} Compare supra Table 5, with Meyer, supra note 6, at 315.
\textsuperscript{106} Compare supra Table 1, with Meyer, supra note 6, at 312.
\textsuperscript{107} Compare supra Table 4, with Meyer, supra note 6, at 316.
\textsuperscript{108} Compare supra Table 2, with Meyer, supra note 6, at 317.
\textsuperscript{109} Compare supra Table 1, with Meyer, supra note 6, at 312.
\textsuperscript{110} Compare supra Table 4, with Meyer, supra note 6, at 316.
\textsuperscript{111} Compare supra Table 5, with Meyer, supra note 6, at 315.
\textsuperscript{112} Compare supra Table 4, with Meyer, supra note 6, at 316.
d. Integrating Online and Print Research

Table 6 compares several results from my survey that heretofore have been discussed separately. Table 6 allows one to determine which sources law firm librarians believe should be taught in an integrated manner. When viewing the table, keep in mind the most important research tasks from Table 1: case law research, cost-effective research, secondary source research, citator services, legislative code research, document retrieval by citation, administrative code research, and digest research. The high percentages that respondents gave to these eight tasks suggest that they should be included in the 1L research curriculum. We can turn to Table 6 in order to determine in which formats to teach these most important research tasks. Here is a full comparison of sources between questions (Tables 1, 2, 4 & 5):
Table 6: Comparison of Most Important Tasks, Best Format & Must Knows

<table>
<thead>
<tr>
<th>Source</th>
<th>Most Important (Table 1)</th>
<th>Usually Online (Table 2)</th>
<th>Usually Books (Table 4)</th>
<th>Must Know in Print [federal/state] (Table 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case law research</td>
<td>89.4%</td>
<td>79.4%</td>
<td>4.7%</td>
<td>43.8%/43.1%</td>
</tr>
<tr>
<td>Cost-effective research</td>
<td>86.9%</td>
<td>Not a choice</td>
<td>Not a choice</td>
<td>Not a choice</td>
</tr>
<tr>
<td>Secondary source research</td>
<td>78.8%</td>
<td>10%</td>
<td>76.7%</td>
<td>68.8%/66%</td>
</tr>
<tr>
<td>Citator services</td>
<td>78.1%</td>
<td>90.6%</td>
<td>—</td>
<td>Not a choice</td>
</tr>
<tr>
<td>Legislative code research</td>
<td>65%</td>
<td>21.9%</td>
<td>36%</td>
<td>62.5%/70.1%</td>
</tr>
<tr>
<td>Document retrieval by citation</td>
<td>58.1%</td>
<td>76.3%</td>
<td>—</td>
<td>Not a choice</td>
</tr>
<tr>
<td>Administrative code research</td>
<td>46.3%</td>
<td>25%</td>
<td>18.7%</td>
<td>49.3%/54.9%</td>
</tr>
<tr>
<td>Digest research</td>
<td>41.3%</td>
<td>24.4%</td>
<td>41.3%</td>
<td>38.2%/47.2%</td>
</tr>
<tr>
<td>Legislative history research</td>
<td>23.8%</td>
<td>17.5%</td>
<td>35.3%</td>
<td>Not a choice</td>
</tr>
<tr>
<td>Administrative law decisions</td>
<td>Not a choice</td>
<td>Not a choice</td>
<td>Not a choice</td>
<td>14.6%/19.4%</td>
</tr>
</tbody>
</table>

According to law firm librarians, we should teach secondary sources, legislative codes, and digests in both the print and online formats. Not only are secondary sources a most important task regardless of format, but the vast majority of respondents feel secondary source research should usually be conducted in the print format. Even though only 10% feel that secondary source research should usually be conducted online, it is important to include such a component. Because new attorneys gravitate to the online environment for this important research, and we can better-prepare them for that if it is included.

Legislative codes and digests should also be taught in an
integrated manner. Over 14% more respondents believe legislative code research should usually be conducted in the print format rather than online, and nearly 17% felt the same about digests (Table 6). Additionally, legislative code research and digest research score very high as “must know in print” tasks.

Cost-effective research should also be emphasized in both formats, given that it is the second most prevalent ‘most important’ task, and because the vast majority of respondents indicate that such research is usually best conducted with a relatively even combination of online and print research.\textsuperscript{113} It is clear from respondent comments that the simple process of learning print-based research will lead to enhanced cost-effective research.

Firm librarians indicate that administrative code and case law research should probably be taught in both formats. However, whether to teach administrative codes in the print format is a tricky call. Only 25% of respondents indicate that administrative code research should usually be conducted in the online format versus only 18.7% in print format. There is justification for a print component aside from the large number of undecided respondents (Nearly 60% did not choose either format for the ‘best done in’ questions.): over 49% of respondents believe new hires in their firm must know how to perform federal administrative code research in print, and over 54% indicate the same about state administrative codes. Federal case law research fell by 10.1% as a ‘must know in print’ task in 2010 (to 43.8%),\textsuperscript{114} while also losing 12.2% for the ‘usually conducted in books’ question.\textsuperscript{115} Additionally, case law research increased 13.8% for the ‘usually conducted online’ question, nearing a very substantial 80%.\textsuperscript{116} However, considering that over 43% of respondents still consider case law research to be a ‘must know’ print task, a print component should be taught (along with a full online component) according to law firm librarians. The percentages for case law research are worth watching in the next survey considering how fast the usual online/book percentages have changed.

On the other hand, respondent answers make it clear that there is

\textsuperscript{113} See supra Part II.C.2.a.(1).
\textsuperscript{114} Compare supra Table 5, with Meyer, supra note 6, at 315.
\textsuperscript{115} Compare supra Table 4, with Meyer, supra note 6, at 316.
\textsuperscript{116} Compare supra Table 2, with Meyer, supra note 6, at 317.
no need to teach citator services research in the print format. Over 90% of respondents feel that citator service research should usually be conducted online, as opposed to just one respondent who noted that citator services research should usually be conducted in books. In addition, no respondent chose citator services as a ‘must know’ print-based source. Therefore, it makes little sense to spend valuable class time teaching print-based Shepardizing, as was also suggested in my 2009 article.

The results of my survey clearly point to the necessity of law schools doubling their efforts to produce graduates who can research competently and cost-effectively. The solution lies in a multi-pronged approach.

III. SOLUTIONS

My plan to prepare graduates to be practice-ready researchers involves three parts. First, law schools must assure that all students receive an appropriate amount of basic research instruction in the first year curriculum, including some print-based research instruction. Second, Advanced Legal Research must be a required course. Finally, legal research must be made a component on each state’s bar exam.

A. APPROPRIATE AMOUNT OF BASIC RESEARCH INSTRUCTION IN FIRST YEAR

1. What Formats and Tasks Should be Covered?

In order to give legal research its proper focus, we must assure that all first year students receive an appropriate amount of basic

117. This tally is not included in Tables 4 and 6 because of its low percentage.
118. See supra Table 5 and Table 6.
119. Meyer, supra note 6, at 316-17.
120. See generally, Steven M. Barkan, Should Legal Research be Included on the Bar Exam? An Exploration of the Question, 99 LAW LIBR. J. 403, 404 (2007) ("[M]ost U.S. law schools have not devoted serious attention to training students to perform this essential lawyering skill."). Barkan also mentioned that such has been a problem for some time, citing to Robin K. Mills, Legal Research Instruction in Law Schools, the State of the Art or, Why Law School Graduates Do Not Know How to Find the Law, 70 LAW LIBR. J. 343, 345-46 (1977) (arguing that legal research has not attained proper stature in the average law school curriculum).
research instruction. All of the surveys summarized in this article support the need for a strong research emphasis in law schools. The pointed comments from law firm librarians and attorneys, that students simply do not understand the mechanics of researching, gives us a clear starting point for first year legal research training: the mechanics need to be taught before shifting to the more complicated integrated approach that teaches research and writing together. In addition, all but one of the surveys supports the teaching of print-based research. Teaching two formats, of course, also affects the amount of 1L research training being offered. My librarian survey calls for more research training than the others do, especially print-based instruction. The librarian survey was also the most critical of new attorney research acumen, whereas respondents to the ALL-SIS Study (which included many experienced attorneys) were far less critical. 121 So the ideal amount of research training that should be taught in law schools likely falls somewhere in the middle of these two surveys, particularly when one factors in the possibility that many schools have limited staffing for wide-scale print-based research instruction.

I propose that the following research components be covered in the first year: secondary sources, digests, case law, statutes, citator services, cost-effective research, search query formulation, other introductory skills, and administrative codes. Secondary sources, digests, and statutes should be taught in both formats and the rest should be taught only in the online environment. I would emphasize cost-effective research in both formats. In addition, students should be introduced to the following areas not specifically covered in my survey but for which there is demand: court documents, court rules and court/practice forms, non-legal research, and information literacy. 122 When students have mastered basic research functionality, I would advance to synthesis assignments that involve the use of several research components for each problem so that students understand “how legal research ‘works,’ as opposed to merely being trained to accomplish discrete research tasks . . . “ 123 Finally, these multi-component research assignments should be tied to writing assignments.

121. See ALL-SIS Study, supra note 37, at 77-94.
122. See, e.g., Valentine, supra note 3, at 220-22 (discussing incorporating information literacy training in a legal research course).
123. Id. at 200.
While teaching research and writing together as part of a process perhaps has its roots with Professor Marjorie Rombauer in the early 1970's, as memorialized in her casebook titled Legal Problem Solving: Analysis, Research and Writing, it is now commonplace and is based on learning theory.

2. Staffing

Although research and writing go hand-in-hand and should be taught together after basic research training, the fact remains that they encompass very different skill sets. When staffing and time permit, research training should be assigned to professional law librarians who are trained in research methodology as part of their library school degrees, and many of whom have recent experience practicing


126. For a discussion on learning theory, see infra text accompanying notes 136-39 (summary of Professors Lysaght and Lockwood describing four common themes of learning theories).


law. This has the benefit of freeing writing professors to focus on the writing portion of their course. Much, if not all, of the aforementioned legal research training could be taught within the year-
long legal writing course. A recent ABA survey reports that 42% of Legal Writing courses dedicate 20% to 30% of course coverage to legal research, and 21% of Legal Writing courses devote more than 30% coverage to legal research. The ideal situation is to have librarians and legal writing professors collaborate so that students may utilize the expertise of both. In fact, such successful collaboration widely exists. Alternatively, a school could offer a separate legal research course that teaches the research basics. It would likely be offered either for one credit or as a non-credit requirement. But this basic research course would not be integrated with writing assignments, since doing so will likely overwhelm the neophyte researcher.


130. Two of my librarians have recently practiced law, and there are several other librarians who have practiced law.


132. See, e.g., Ass'n of Legal Writing Dirs. Legal Writing Inst., Report of the Annual Legal Writing Survey 10 (2013), http://www.lwionline.org/uploads/FileUpload/2013SurveyReportfinal.pdf (Both legal writing professors and librarians teach basic legal research in 86 schools, solely librarians teach research in 51 schools, and solely legal writing faculty teach research in 64 schools. This suggests a healthy amount of collaboration between legal writing faculty and librarians.).

3. Teaching Pedagogy

Before moving on to the second part of my solution, I would be remiss if I did not touch on the connected consideration of proper classroom pedagogy. This is not an attempt at an exhaustive discussion on pedagogy. There are many works that cover teaching methods.\textsuperscript{134} The brief discussion below serves to suggest viable ways to increase student engagement and information mastery.

Many of us teach legal research as a hands-on, practical course because it allows students to apply what they have learned, which is a main theme in the \textit{Carnegie Report}.\textsuperscript{135} Additionally, we should consider using learning theory because it offers the best chance for students to learn and retain complex information. Professors Pamela Lysaght and Cristina Lockwood provide a concise summary of learning theories. They identify four common themes: start by teaching basic information within the realm of what the students know and then introduce progressively more difficult material;\textsuperscript{136} use a variety of teaching methods to engage every learning style;\textsuperscript{137} allow students to apply what they are taught and provide feedback;\textsuperscript{138} and strive to make students autonomous learners.\textsuperscript{139} It is important to identify the knowledge level of each student and start the learning process at that point, which affords students the best chance to learn new knowledge.\textsuperscript{140} We should introduce concepts incrementally so as to


\textsuperscript{135} Carnegie Report, supra note 2, at 12-14 (discussing practical skills as being part of "A Framework for Legal Education").

\textsuperscript{136} Pamela Lysaght & Cristina D. Lockwood, \textit{Writing-Across-the-Law-School Curriculum: Theoretical Justifications, Curricular Implications}, 2 J. Ass’n Legal Writing Directors 73, 92-93 (2004); see generally, Schwartz et al., supra note 134, at 72-74. The authors note that we should strive to use more than one teaching method in each class, and we should use many methods over the course of the semester. \textit{Id.} They also note that retention rate rises from a low of 10% if a student is asked just to read material, to 90% if the professor has the student speak and act. \textit{Id.} The more passive seeing and hearing activities only amount to about a 50% retention rate. \textit{Id.}

\textsuperscript{137} Lysaght & Lockwood, supra note 136, at 93.

\textsuperscript{138} \textit{Id.}

\textsuperscript{139} \textit{Id.} at 94.

\textsuperscript{140} Commission on Behavioral and Social Sciences and Education, Nat’l
allow students to process the material and eventually apply what they have learned. This will allow students to better recognize when they need more information to complete their understanding of a particular issue. If the whole process is repeated enough times, students develop schema, and they are then ready to learn new concepts. Research shows that hands-on experience is invaluable in enabling learners to more quickly identify relevant patterns and apply general concepts to information, making it easier to commit information to the limited short-term memory while effectively moving the course "beyond transmission of content to 'deep learning' and cooperative experience." Conversely, the traditional law school method of teaching discourages the type of professor-teacher interaction that facilitates proper learning.

Kaplan and Darvil identify additional concepts that may be utilized to effectively teach today’s Millennials, namely the use of multimedia and collaborative projects, and a focus on current issues. Incorporating multimedia into the course helps relate to a generation who grew up with access to the Internet and who has used technology as an integral component of educational experiences. Kaplan and Darvil note that “[m]illennials want more variety in class.” They will likely learn material better if it is presented in a multimedia format. Some examples of incorporating media into a course are: playing a video clip from a popular television series or movie that introduces a relevant fact pattern or issue you want to base a lecture or

142. See NAT’L RESEARCH COUNCIL, supra note 140, at 12.
143. See Sloan, supra note 141, at 7.
144. See NAT’L RESEARCH COUNCIL, supra note 140, at 32-50.
145. Sarah Ailwood et al., Connecting Research and Teaching: A Case Study from the School of Law, University of Canberra, 22 LEGAL EDUC. REV. 317, 333 (2012).
147. See Kaplan & Darvil, supra note 124, at 177-87.
148. Id. at 177 (citing Christy Price, Why Don’t My Students Think I’m Groovy?: The New “R”’s for Engaging Milennial Learners, 23 TEACHING Professor, Aug. 1, 2009, at 5).
exercise on; or creating a TWEN or Blackboard page where you can employ assessment quizzes or conduct e-polls, link to online CALI exercises or other relevant URLs, cite to pertinent case law, or upload anonymous practice exams.

Millennials have often experienced a substantial amount of classroom collaboration before attending law school, which is said to be learning-centered as opposed to the traditional lecture-based ‘teacher centered’ approach.\(^{149}\) There is danger in losing a student’s attention with the traditional approach, as they likely have had little or no similar experience.\(^{150}\) Some examples of classroom collaboration are: pairing students to conduct in-class exercises, creating subject-specific lectures, or discussing and presenting an answer to a difficult question.

Incorporating current legal issues into the classroom is an effective way to keep the attention of your students.\(^{151}\) For a legal research class, you can use a very recently enacted law, a Supreme Court case that is nearing a decision, or a proposed legislative bill on a topic of popular interest. Using examples of popular culture celebrity litigation as a means to introduce a subject or document type is also effective. Others use video or audio clips of popular music as a means of drawing the attention of their students to a new topic. Some invite guest lecture practitioners to speak about issues relevant to their practice.

**B. MANDATORY ADVANCED LEGAL RESEARCH COURSE**

The second part of my solution is a call for a mandatory Advanced Legal Research course. It should include several hands-on practical research experiences, should involve the use of several resources and formats interchangeably, and should be integrated with writing assignments. Making this a required course may cause staffing concerns in many law schools. Having been part of librarian teams that have had significant teaching responsibilities, it is clear that this requirement will have to be carefully implemented so that other staff duties may still be performed in a timely manner. Teachers will often

\(^{149}\) *Id.* at 175.

\(^{150}\) See *id.* at 177.

\(^{151}\) *Id.* at 186-87.
need to have split work schedules to accommodate their classes, and there must be ample reliance on non-teaching staff to cover basic library services during class and prep time. Despite the difficulties, this is successfully accomplished in many libraries.\footnote{152}

An Advanced Legal Research course will help in four ways. First, it will reinforce basic research concepts taught in the first year. Second, it will allow educators to build on those basic concepts to teach more in-depth techniques. Third, it gives teachers one more chance to employ hands-on experiences. Fourth, a mandatory Advanced Legal Research course gives legal academia much more time to prepare our students for research in practice.

C. MANDATORY RESEARCH COMPONENT TO BAR EXAM

Finally, all jurisdictions should administer an expanded Multistate Performance Test (MPT) that includes a research component.\footnote{153} The majority of states already require the administration of at least one of the two 90 minute MPT sections (called ‘items’) on their bar exams,\footnote{154} but the MPT does not test legal research skills. Adding a legal research component to the MPT will force law schools to pay appropriate attention to legal research competency.\footnote{155} Perhaps a library of online legal resources could be made available so that the examinee would have to exhibit the practice skills of selecting the appropriate databases and crafting adequate search queries.\footnote{156} Online legal database

\footnote{152. For example, at University of Detroit Mercy School of Law, we make proper provisions to assure that the reference and circulation desks are staffed when our librarians are teaching. We also take into account any critical work deadlines when drafting the teaching schedule. Similarly, at Loyola Law School in Los Angeles, California, librarians are permitted flexibility to schedule hours between teaching and research work.}


\footnote{155. E.g., Barkan, supra note 120, at 406.}

\footnote{156. But see Barkan, supra note 120, at 410-11 (suggesting that rather than giving everyone access to a database, this test may best be administered via short answer and}
providers might find it advantageous to provide access to parts of their databases via a secure proxy server.

IV. CONCLUSION

We will be able to better prepare our graduates to conduct the Fundamental Lawyering Skill of legal research by taking steps to infuse research training throughout the curriculum, as the Carnegie Report recommends for lawyering skills. This article proposes measured efforts to do so in the form of increased legal research training in the first year and a mandatory Advanced Legal Research course, both of which will include some print-based research components. In addition, law schools will have further motivation to emphasize legal research if a research component is required for every state bar exam.

multiple choice questions).

157. CARNEGIE REPORT, supra note 2, at 194-97.
Appendix A
2010 Legal Research Questionnaire

Thank you for participating in this short anonymous survey, which should take about 15 minutes to complete.

1. What type of office do you work in?
   - Law Firm
   - Government
   - Academic
   - Business
   - Public Interest

2. About how many attorneys are in your local office?
   - 1-25
   - 26-50
   - 51-100
   - 101-200
   - Over 200

3. What online legal research services do entry level attorneys in your local office have access to?
   - Westlaw
   - LexisNexis (excluding Courtlink)
   - LivEdgar
   - CourtLink
   - ChoicePoint
   - Other (please specify)
   - Dun & Bradstreet
   - VersusLaw
   - PACER
   - LoisLaw
   - RIA Checkpoint

4. What online legal research services must entry level attorneys in your local office know how to use?
5. What print materials are available to entry level attorneys at your local office?

In addition to up-to-date sources, you should count titles that were canceled but are being kept because they still have value (Example: A regional reporter set that was canceled four years ago but that is deemed important enough to keep for a few more years.).

- Federal case law reporters
- Federal legislative codes
- Federal administrative codes
- Federal administrative law decisions
- Federal digests
- Federal loose leaf treatises, practice guides or encyclopedias
- Your state’s case law reporters
- Your state’s legislative code
- Your state’s administrative code
- Your state’s administrative law decisions
- Your state’s digests
- Your state’s loose leaf treatises, practice guides or encyclopedias
- Regional reporters
6. Please indicate the significant print titles that your local office has canceled within the past three years, along with the cancellation year. Ex: Pacific Reporter, 2008.

For brevity, if you canceled a number of significant state-specific or federal treatises, just give an approximate number of such titles without listing them. Ex: 8 to 10 major California treatises over the past two years.

7. What print materials must entry level attorneys in your local office know how to use?

☐ Federal case law reporters  ☐ Your state’s legislative code
☐ Federal legislative codes  ☐ Your state’s administrative code
☐ Federal administrative codes  ☐ Your state’s administrative law decisions
☐ Federal administrative law decisions  ☐ Your state’s digests
☐ Federal digests  ☐ Your state’s loose leaf treatises, practice guides or encyclopedias
☐ Federal loose leaf treatises, practice guides or encyclopedias  ☐ Regional reporters
☐ Your state’s case law reporters

8. What are the most important research tasks (online or in print) that entry level attorneys in your local office must know how to perform?
9. Based on your experience, what research tasks should usually be conducted in books as opposed to online?

- Case law research (excluding digests)
- Digest research
- Legislative code research
- Administrative code research
- Shepard's/KeyCite
- Secondary source research
- Cost effective research
- Document retrieval by citation
- Legislative histories

10. Based on your experience, what research tasks should usually be conducted online as opposed to in books?
11. Based on your experience, cost effective research is usually accomplished best under which circumstance?

- Always or nearly always through online research
- Always or nearly always through print research
- With a relatively even combination of online & print research
- By a combination of both, but mostly online
- By a combination of both, but mostly in print

12. What Westlaw contract plan or plans do you have?

- We do not subscribe to Westlaw
- Transactional
- Flat-rate
- Hourly

13. Is your Westlaw flat-rate plan unlimited in scope or is it limited so that any research beyond those limits results in extra costs?
We have no Westlaw flat-rate plan

It's totally unlimited

It's unlimited with a few exceptions (explain below)

It's an extremely limited flat-rate plan (explain below)

Other (please specify)

14. What LexisNexis contract plan or plans do you have?

☐ We do not subscribe to LexisNexis
☐ Transactional

☐ Flat-rate

☐ Hourly

15. Is your LexisNexis flat-rate plan unlimited in scope or is it limited so that any research beyond those limits results in extra costs?

☐ We have no LexisNexis flat-rate plan

☐ It's totally unlimited

☐ It's unlimited with a few exceptions (explain below)

☐ It's an extremely limited flat-rate plan (explain below)

☐ Other (please specify)

16. What are the specific causes for entry level attorneys in your local office incurring excessive online research costs?

17. What comments or concerns about legal research would you like to share?
Appendix B: Law Firm Comments—2010 Legal Research Survey

Comments were edited only for grammatical purposes. The substance of comments was not changed.

- Overall, training works, and the more you can do, the better. Over time Lexis and Westlaw reps have begun to stress the cost-effective over other aspects of training, and this coordination has helped a lot.

- We have comprehensive agreements with Westlaw/Lexis but never, ever use the term "flat rate" and neither do most other firms. It is a term used by vendors and law schools. It has no application for our clients and is very, very unhelpful to teach law school students to think that it applies to firms. You do them a grave disservice by using language that creates an unrealistic expectation of law firm access. Attorneys perform a search; each search incurs a charge; that charge, minus a discount, is billed to their client. That is what happens, that is what they need to know. Most summers and first years arrive at law firm woefully unprepared.

- Attorneys are not taking the time to attend training classes.

- I realize that the law schools have staffing constraints but I really think the sales vendors should NOT be teaching online research.

- Most students have no idea what the digest are for and most have never heard of secondary titles.

- The main problem I see with new attorneys is that they don't consult treatises or encyclopedias before resorting to case law. For example, Delaware law is crucial to corporate attorneys. It behooves them to be familiar with the law via a wealth of treatises before they dive into case law. These may be online or in print treatises for those who consider books "a 1950's technology," as one first year associate stated when I showed him a set of treatises on our shelves. Also, the common complaint of librarians: the new associates do not know the difference between laws and regulations. Pundits say this is because students are no longer taught civics in public high schools, but surely they should learn this in law school. Another problem I see is that newer associates have problems
with analyzing issues of law. They tend to do predominantly fact based search terms repeating what they have been told by partners or senior attorneys.

- Also—the new attorneys think all answers must be free on the web somewhere and often call us with “I’ve looked on the web for hours and found nothing . . . can you help?”

- Google is not the answer! The students should be taught that there is nothing wrong with asking when you’re not sure of the answer. Better to ask then to waste time floundering around trying to find something—when you’re probably going around it the wrong way. Librarians are your friends—cultivate the friendship!

- There is very little support to train new lawyers on research even though they need it. Academic work highly differs from practice and they need practical training. There is a huge focus on research done by litigators but hardly any for transactional lawyers. Everyone seems to learn how to find a case but no one knows how to find where a company is incorporated or where to find a company’s most recent prospectus. Case law research is emphasized but there is little attention given to statutes, codes and rules. Also, if they don’t take administrative law in law school they are completely lost as to how the Securities and Exchange Commission or the Department of Justice or Office of the Comptroller works.

- Main concern: young lawyers are coming out of school with very little knowledge of research and sources; a shocking tendency to want to “Google” everything; a reflexive desire to jump right online for every research issue; simply not realizing how useful a book can be, to introduce you to a topic and to find answers without reinventing the wheel—whatever your issue, someone else has probably already covered it, and if they haven’t, that sets your expectations about the probable paucity of info you’re going to find online as well.

- Things will be changing in law firms so quickly and profoundly over the next few years, that what’s true today may not be true tomorrow. The death of the billable hour, alternate fee arrangements, lower costs for legal research, competition in sources of legal materials (i.e. Bloomberg Law), the rise of
Generation Z (true online adaptists)—all will have a measurable effect on how we view what’s considered “effective” legal research.

- It should be more of a priority to teach in law school.
- Consider librarian as an additional “free” resource in knowing best sources of information. Knowing when to use ‘free’ versus ‘fee-based’ options. More emphasis on value of digests & use of table of contents & indices instead of running searches through databases would be helpful. Ability to compare various sources in print versus looking online. Value & function of legal encyclopedias and hornbooks. Paying attention to source of material found on the Internet & possible inaccuracies or bias or no longer current information.
- When they discover what value the Digest systems have they are flabbergasted that they never learned about this in school. The research becomes much easier after that.
- I think Lexis/Westlaw access should not be free, but should carry a low cost charge by semester. Every time a law student signs on, (like a phone card), they use some of the value behind the id or password. If their IDs run out of reserve or value before the semester ends, students should be able to purchase additional hours, but at a higher cost than the original value. Then, when the next semester starts, their IDs are re-charged for the semester again. These people need to know that Online Legal Research IS NOT FREE in the real world after law school.
- Although we have a flat rate contract for some of our online services, that doesn’t mean that searching is free. We still bill our clients for the research (passing along any discounts due to the flat rate), and our future contract is negotiated based on current usage. So the more we use the service, the higher our flat rate level will be the following year.
- It’s important to remind attorneys that not everything is on Westlaw or Lexis. Remind them to take a moment before starting their research to consider what the best resource to use is, and to take into consideration not only the cost of the resource but the amount of time it takes to search.
- New associates are deficient in print research. They need to
have an understanding of how the print resources work before they try to use them online. Also, they are lacking basic knowledge of what are statutes vs. regulations; digests and the Key Number system; they think library staff should do Blue-booking for them (wrong); they don’t know how to use tables of contents or indices in print resources.

- Make legal research worth more credits, so students take it seriously; make students take advanced legal research; get the faculty on board with both ideas.

- New associates need to make better use of print and/or online resources for which we have annual subscriptions (no charges to clients).

- New researchers assume “everything of value” is online. They trust free online sources as much as trusted legal vendors—perhaps more. WESTLAW & LEXIS should provide an “approximate cost” when a student signs off Law School WESTLAW or LEXIS equipment. Student have no idea of the cost of their research or how to be cost effective. The success of our law firm has been to verify research using books. We catch mistakes in legal research arguments that give us an edge.

- Books! They tend to waste time poking around online when they could have easily and efficiently found the answers if the used the state practice series. I tell them if they spend more than 20 minutes using any resource without result, they should consult with the librarian for guidance/suggestions.

- Almost every new associate comes to the firm wanted to look for cases. But half the time cases aren’t the answer and, even when they are, the best way to start looking for cases is usually using another resource—treatises or articles especially. Also digests, annotated codes, etc.

- Advanced Legal Research should be a required course. Law students need more in-depth instruction in how to use loose-leafs, in the legislative process and how to interpret a legislative history; more instruction in how to do regulatory research and regulatory history; more instruction in just how much is available from government or other resources in the internet that can keep costs down; how to use Library staff;
how to combine print and online research for more cost-effective and substantively effective results. It would be helpful if when doing research tasks in a course, that law students keep track of “billable” hours and get some kind of pro-forma estimate of what the online charges would have been, both retail and under a flat-rate contract, say at a 50% discount. In addition, you should teach them how to check in Westlaw and Lexis what database searches and document delivery fees will be before running a search. When WestlawNext becomes available, drill into them how the search and billing paradigms have changed, how WestlawNext will be charged at a premium, and document view fees will be different, and how to minimize them by, for example, looking at the cases first in Google Scholar to see if they are relevant and useful before viewing them. Emphasize that firms now want, not only cost recovery, but cost prevention and predictability, and that good research skills are very important to this.

- New associates should be able to comfortably research both electronically and in print and be able to use both methods when appropriate.

- It sometimes takes me a while to convince entry-level attorneys that using secondary sources first will often save them time. Their inclination is definitely to jump into a case law database right away.

- Students need to understand that there are still a lot of places to go. LEXIS should not even be the starting point for a lot of research; how to judge if they are good and use other services to verify data; It is not so much print versus digital, but how to look for both; They need to know how to establish validity, for example if they are doing state code research and they use the free state edition, that they need to confirm that citation has not changed by running it through a citation system; Legislative history is good example that people need to understand that some of it is digitally available up to a certain point and prior to that point needs to be done in print.

- Law students must understand that all online research has costs, even if a firm has a flat rate unlimited plan in place. In
addition, in the current environment, clients are increasingly refusing to allow firms to charge back for online research which means that much of it is written off.

- They don’t learn how to use the books. They automatically go online.
- Just ask if you are not sure. I think they are sometimes nervous to let someone know they do not know how to do something. Don’t worry—it is better to ask than get the bill from your supervisor. We still see what the charges are before the flat rate. If you are too nervous, call the Lexis or Westlaw reference attorneys for help. But don’t be nervous, we field a lot of questions.
- There are lots of free and valid online research sources. Law schools should also teach about these.
- All primary sources of law should be easily and cheaply accessible online (and most of them are). But for some things, like codes and court rules, books just work better because we often need to see the structure of the code at various levels. Lexis would work better for codes if its table-of-contents interface weren’t so kludgy and dated (I have complained about that to them). My only other major gripe with online legal publishers is that they can’t seem to figure out how to devise a search system that is as effective as, say, Google.
- Firms should test applicants to determine their level of competence in using online databases.
- I have seen two extreme approaches: they expect to find a treatise on a very narrow topic and they look at you like you don’t know your stuff if you don’t have an answer; (2) they just don’t see how they can contextualize a research assignment by using books or dictionaries, or digests. We just want to know what electronic sources the academic libraries have and what the students are taught.
- Pricing of Lexis and Westlaw for law firms, especially as measured against the costs for law schools, remains inexplicable.
- New lawyers should think about research as though the money is coming out of their pockets.
- We have found that the West WILR program integrating print
and online research is valuable to summers and first years. We librarians teach on an as needed basis.

- My experience so far this summer is that the clerks are having difficulty realizing that they may have to spend hours on one research project—it’s not a Google-it-to-the-top process. Don’t discount the value of paper indexes just because you’re used to electronics. Put as many arrows in your quiver as you can.

- I believe law students should at least be introduced to online research costs while in school, and [should be taught] a course on how to conduct a search. I see way too many instances of kids fresh out of law school taking what I call the ‘shotgun approach’ to legal research where they just fire away (run searches) until they hit something. Part of that may be attributable to my first statement—they have no concept of online costs until a partner or client comes yelling about the bill.

- Entry-level attorneys don’t seem to be as familiar with the utility of table of contents and indices found in print publications.

- Don’t know basics—how a bill becomes a law; how the regulatory systems work at both the federal and state level; lack of experience with secondary sources; lack of experience with print.

- More schools need to offer programs/workshops/assignments on cost effective research. They need to be aware that there is a growing trend among clients to refuse to pay for electronic research. While books are becoming rarer, they should at least be given an overview of using digests, reporters, and possibly treatises (though those are going to be practice specific). I’ve had summer associates and first year associates tell me that they were terrified about hearing how a transactional plan works. This could be ameliorated with more preparation in law school. And the vendors should be responsible for also sharing the costs of these searches. They need to show them how to find the cost of searches in both Westlaw and Lexis and give them some basic idea of the costs of the most basic types of searches. For too long, Westlaw and Lexis have hooked attorneys on unlimited research like crack, with no care as to
how effective they are at researching. As long as they’re hooked that’s all that matters to them.

- Entry-level attorneys develop bad online legal research habits before they come to work at a law firm. After they get to a firm they think they know everything, actually they know nothing or next to nothing. They do not even know what Wright & Miller is or Moore’s, they act like you are speaking a foreign language, if you say Manual for Complex Litigation or MDL (Multi District Litigation) their faces turn white. They look at the books like they are foreign objects not to be touched unless they can put earphones in them. They cannot even find things using an index, table of contents or finding aids.

- Not taught nearly enough in law school—I teach an advanced legal research class at Georgetown, and even the most prepared students coming into the class are terrified at how ill-prepared they would have been if they had left school without our course.

- Sometimes a firm is not able to give a lot of guidance re: how online should be billed. Really need to ask specific attorney for whom you are doing research what they expect—some use what you need and will write off rest; some bill office not client; if bill client be very circumspect.

- The use of books for searches that are not appropriate for online searching in the current technological environment. There has to be additional strides in computer software before there can be an elimination of books.

- They don’t understand the civics 101 aspect of the research, namely how laws are made; difference between statutes and regs; how to use an index; what annotated statutes are.

- Librarian is best research resource in the entire collection. Always best starting point. We can save the 5 hours research time when assoc. has DC opinion from 1971 citing DC Code section that he cannot find in the current code book, on LX or WL. The Customer Service at both LX and WL cannot find it either and conclude it must be a mistake in the citation in the opinion. When librarian is finally consulted, Librarian knows the code was revised in 2001 and refers to a disposition table. Librarian produces the language in 5 minutes. Can’t find that
experience in books or online or Google. Five minutes or five hours: what would you want to pay for if you were the client?

- The law clerks always surprise me in how little print research they do know how to do, they are entirely dependent on online databases and sources. Whereas new associates spend time with state treatises, and practice specific books.

- The fact is many legal questions will be answered with something other than case law and schools really don't teach students to search or even think of where to start their search except for in case law.

- Assuming that we the materials in both paper and electric we let attorneys decide which format they prefer. In some cases, due to space restrictions, we only have materials online.

- Law schools should focus on training beginning with print resources—the old fashioned way. Electronic research is fantastic and can be a real time saver, but I find that most young associates have no idea what they're actually doing. They do not understand the elements of the law they are researching because they just throw together some search terms and look for the matching terms, instead of the relevant law. Mixing both print and electronic research is the only way to appropriately research. Start with the secondary resources to gain a greater understanding for the topic, then switch over the electronic research for case law and Sheperdizing/KeyCiting.

- Summer associates come to us knowing nothing about the practical aspects of doing research. For us is it not a scholarly pursuit; it is business and it needs to be done in the most efficient and time sensitive way possible. Law schools don’t teach students about secondary sources and it does them a huge disservice when they get to a law firm. Law schools need to acknowledge that they are preparing people to work in a BUSINESS.

- THEY ARE STILL ARRIVING WITH LITTLE CONCEPTION OF ANY SORT OF LAW EXCEPT CASE LAW. THEY DO NOT UNDERSTAND HOW LAWS OR REGS ARE MADE AND HOW LAWS AND REGS FIT IN TO THE SCHEME OF LAW MAKING.

- Vendors need to stop the unlimited online research given in law
school and really train students in effective online research. Until an associate gets a client of their own, they could care less about online charges or billing in general. It isn’t until they have to charge a client for services does money start to matter.

- In general, law students are not taught the cost of doing business as a lawyer. Even some seasoned lawyers don’t want to be bothered with understanding overhead costs. Law schools would do well to teach students basic business and financial management. 2. Law students should be taught that every legal research resource may not be available where they work. They should be taught how to use a library and how to build relationships with law librarians.

- Think about what you are really looking for and make a plan before going online.

- I wonder if creating law school WL/Lexis research assignments replicating real-world constraints would be useful i.e., letting them use only cases they find in 3 transactional searches to write their memos. Or going over their research trails with them. I do that with our new hires all the time.

- Associates do not seem to understand that if something is not billed to a client then the cost becomes an overhead cost. That overhead cost then reduces the profitability and affects their bonuses, operations capabilities, etc.

- Entry level attorneys should be aware that they don’t know everything and that there are many people to be used as resources, not just other attorneys.

- Unless there is a familiarity with the subject matter, ELA’s should be well versed in both online and electronic research so that they can completely understand their question. Reliance on one or other does not necessarily mean they are competent and have completely covered their commitment to client representation.

- Future legal research training courses should provide a mix of online and print demonstrating the value of both formats. Legal research courses in law schools should be required in year one but carry as much credit power as any other legal course work in law school. In years two and three, perhaps students should be required to complete a legal research exam (searching for
answers in the library and online) to demonstrate that their research skills are improving as they complete each year of law school.

- Questions posed to lawyers requiring research generally do not have pat answers. Such questions require research and analysis skills to analogize and synthesize material. Attorneys in law firms giving assignments do not tell junior associates what sources to look in. Thus, exercises in law school with easy to find answers in the source identified as the subject of the exercise are useless in terms of demonstrating to students what researching and analyzing will be like when they are practicing law.

- I have seen more attention to choice of format and learning about various options within the firm before going online or starting a project but there is a long way to go. Students must finally understand that Lexis and Westlaw are not always starting points; costs are paramount; efficient and effective searchers are winners. They have an information tool belt and use it thoughtfully.

- Need to be well grounded in fundamentals of how to do research, and be aware that there are quite a few resources available in the specialized areas of law. be willing to look for advice on the best resources to use.

- There is an increasing view that all information is accurate, easily available, and free on the web. Needless to say, while there’s a lot of good info out there for free, sometimes 15 minutes in a database is more cost effective than 3 hours looking for reputable free sources.

- New associates think that all their answers will be answered online. Not all treatises are available online. They might also want to consult with the librarian if there are other services available that would help them that might not incur additional charges (e.g. CCH, BNA, . . .)

- Students need to be made comfortable to use both print and online. Those familiar with the content of treatises or other material in print will be more likely to understand the best ways to approach some of those when online is the only option available to them. And, remember—encyclopedia are not
wikipedias—AmJur and CJS are still relevant in print!

- Too much Googling not enough understanding of the results.
- Westlaw and Lexis need to wake up and smell the coffee. Cut pricing, stop gouging, and look out—here comes Bloomberg Law—poised to replace each firm’s second place online service.
- They don’t know what they don’t know. There’s practically NO need to conduct actual meaningful legal research in law school, so it’s really not a skill they’ve managed to hone during their legal education.
- When asked about research skill level, a common response is I can Google. In a lot of small-midsized law firms, books are a thing of the past. Sad but true. This is the Google generation and vendors take advantage by describing their products as “comprehensive.” One stop here—that’s all.
- Cost factors.
- Lexis or Westlaw should not be the place to begin research
- We are extremely aggressive in trying to make attorneys aware of pricing and alternative databases
- They rely too much on GOOGLE or other Internet search engines these days. They do not have a plan in mind when researching. Should be taught how to judge a good reliable resource from a random website. In general they want to take the easy way out and do as little research as possible. I’ve been in law firms for 20 years and the research habits get worse every year.
- Any instruction that stresses the importance of planning a research activity and the importance of considering all research resources before starting a research activity should produce positive results for anyone attempting to perform cost effective legal research. Thanks for asking!
- It is important for the firm partners to support the Library. New associates pick up on that support, and bring their research projects to us for assistance. We answer more than 3,500 research requests annually, as a result. Partners and Associates should be aware of the cost savings achieved when they use the Library.
- The idea that everything is available without cost concerns and
online. It simply isn’t the case in many firms. My concern then becomes that the research is not performed thoroughly because of the fear and/or lack of knowledge. My goal is to provide assistance without judgment but it is sometimes difficult to get that thought into their heads.

- The use of secondary resources in print are where our new associates are weak. Many expect to find answers to complicated banking transactions online.
- Thorough, fast, cheap—pick two.
- I wish there was some consistency about what was taught at all law schools/I wish there was a requirement for an advanced legal research class/I wish it was taught to use a mix of online & print resources/I wish they didn’t think everything was “online” & it was all free.
- LEXIS and West Law are both good products but you MUST simplify your pricing schemes. Tiered pricing is ludicrous—I much prefer the Bloomberg Law approach—very clear and very concise. Bloomberg is going to ultimately give both LEXIS and West Law a run for their money, I think.
- Law Schools MUST teach students in an accountable way how to effectively use CALR. This is more important than ever, because I have Summer Associates who have never opened a book in a Law Library. Their world is online, and they must be taught distinctions between Internet research and CALR and must learn how to use CALR well BEFORE working in the real world. That must be part of their new reality.
- I’m at the point of wanting to PAY associates to come to training . . . they won’t come, and it shows. The whole hubris of ‘I know what I need to know and can’t think of anything else I can learn’ is just ridiculous and frustrating.
- I am finding that law students believe that a case-law or statutory search (conducted online) is the very first thing to do: they do not look for a secondary source to explain the entire context and help them get a head start on their case law/statutory research. They spend so much time looking online (and sometimes not even knowing what they’re looking at—a primary or secondary source) that they sometimes miss the fact that they may not truly be comprehending the issue
they’re asked to research.

- PLEASE teach them to be cost-aware. Please teach them to ask questions, and not just dive into expensive research as if it were Google!

- Our partners are concerned that new lawyers don’t know about the seminal treatises in particular areas of law. This lack of knowledge makes the partners question the quality of research. If you are unfamiliar with an area of law, start with treatises.

- Students should have a government documents class like librarians, so they understand the workings of the United States government. That way, they would know where to start in doing legislative and administrative research.

- Most new attorneys do not understand/use secondary sources enough. Many do not understand that primary law includes statutes and regulations.

- Thank you for surveying us law firm librarians!

- They come in to the firms not knowing anything but Google and how to search case law. Their search capabilities are Google based so not time or cost efficient.

- Most newly graduated attorneys have never heard of Hein Online. New graduates need much more experience using and understanding KeyCite. They also need more practice doing statute and case research online.

- It seems many law students don’t know how to do research,

- Re: Question 11—the best cost effective research is done by starting with print treatises, pulling and updating and getting to understand the relationships between the legal materials online, and then reading and processing information with print materials or print-outs. Familiarizing stage = print. Mental mapping of the area of law and updating = online. In depth understanding of specific materials = in print.

- If you cannot effectively search manually you cannot effectively search online.
Appendix C: Respondent comments regarding excessive research costs
These are some of the many comments to the question of “What are the reasons for excessive online research costs?” Comments are edited only for grammatical purposes. The substance of comments was not changed.

- I wish I really knew. Sometimes they just don’t know how to use it cost-effectively (in spite of all the training we do), maybe they are in a big hurry (wouldn’t be surprising). A partner said to me that he wondered why two people in the same practice group given roughly the same kind of assignments could have such different amounts of Westlaw/Lexis usage. Maybe it’s research preferences; there are those who will give their research to the Library and those who want to do it themselves.
- Probably forgetting about focus & locate.
- Failure to understand Boolean search basics, to select appropriate files, to ask for research assistance, to understand file pricing, and to understand how research is billed to clients. Usually all of these at once.
- Ignorance and not understanding bill backs to clients.
- They think everything is free! They treat the online research databases like Google. They don’t think about their research before they start.
- Failure to plan, confusions in switching between hourly and transactional searching; not understanding the costs of printing
- Not knowing when to search broadly and then using the narrowing features of the online system—such as Focus in Lexis. Secondly, they choose ALL database when they should only be searching with a particular state.
- Not knowing how to start research in an area which is new to them.
- They don’t really understand the difference between transactional search and hourly search. They don’t have any idea what’s available as secondary sources in print—e.g.—searching ALLCASES for basic contract law materials or searching TP-ALL for anything on their topic. Also, forgetting they are using the database hourly and doing other tasks.
- Do not know how to effectively strategize a search before
touching the computer. The idea that if they can’t find it, it isn’t there. Not knowing when to use the reference/help desk of the vendor.

- Being unaware of low cost research alternatives and lack of training are the main cause for excessive research costs.
- Lack of good online research habits.
- Lack of attendance at law firm Westlaw and Lexis training where the contract and pricing is discussed as well as databases outside of the contract.
- Not realizing the cost of particular searches 2. inefficient search methods—searching larger files than required; duplicative searching.
- Ignorance of how the contracts work and how much W/L costs, not knowing the best cost-effective strategies, more training needed in basic searching,
- Ignorance
- Combining sources that overlap. Running multiple searches when one or two searches are necessary. Printing/downloading hundreds of results instead of reviewing online to limit to a dozen relevant results.
- Inadequate preparation before logging into the database. Not checking print treatise resources that would have saved client time & money spent online. Not practicing efficient research practices. Not being aware of costs incurred by clicking on hyperlinks. Using a large (combined) file instead of a smaller (cheaper) one
- Poorly constructed searches repeatedly run in a transactional database.
- Not understanding how research costs are incurred. I show them their bills and they are shocked.
- (1) Not realizing the difference between transactional/hourly pricing; (2) Not being familiar with the scope materials available online; (3) Using West and Lexis before considering other online sources like CCH, RIA, etc.
- Law schools over-encourage students to do online research rather than a composite or mix of books and electronic services. They also do not pay attention to the distinction between files that are included in the contract versus the
“excluded files”, the use of which is billed to us at retail costs OVER AND ABOVE our monthly flat rate.

- Performing multiple searches on the same idea rather than using Boolean search logic to combine a variety of keywords into a single search string. Lack of understanding
- Doing multiple searches and not realizing that they should do a broad search first and then focus.
- Searching incorrectly with hourly or transactional pricing. Using databases outside of our contract.
- Using resources outside of our plan, signing on with the transactional plan then running multiple searches in a large database instead of a single, broad search then using Focus or Locate. Using a database that is larger than their needs (such as AllCASES when they just need NY cases). Also, not attending Lexis or WL training to learn about the firm’s contract.
- Using files not in our plan without first consulting the librarians or the vendor themselves; not using research tips, i.e. not using ‘focus’ to narrow a broad search, not truncating, etc. ...
- Not understanding how Lexis/Westlaw charge for searching; not understanding that having a contract does not mean that there’s no charge; thinking that Lexis/Westlaw charge to print documents but not to download or email them Not understanding the assignment Not starting with a free source, either in print or online, to get a better understanding of the subject matter, to learn what terms will work best when searching online, and to identify the most important cases and other primary source materials.
- Free access in law school without knowing the consequences in the real world; attorneys that are more senior (therefore more “knowledgeable”) telling them to “just go online”; not enough legal research training in school.
- Their searches may be too broad or too specific, and they may run new searches instead of refining their original ones.
- Ignorance and arrogance; free online access spoil them to use online sources without thinking.
- Lack of understanding of digest headnotes; key numbers; indices; no knowledge of primary sources and how they are organized.
• Using content outside the flat rate contract (even though they get a prompt telling them it is outside), forgetting to log-off, using the hourly option but stay on too long looking at results.

• They should look in print treatises, digests, annotated codes and (to the extent available) case reporters first. 2. They should do preliminary online research on Fastcase (or another service that does not bill back, such as the BNA or CCH services, even Google). 3. Only once they know the legal background and what they are looking for should they go onto Lexis or Westlaw. 4. They should take the time to learn the basic elements of cost-effective online search (e.g., doing a general search and then using Focus or Locate if they are being charged by the transaction). This information is available in brochures from both Lexis and Westlaw—and the librarians are glad to teach it at any time.

• Using too broad a database at first, not doing preliminary research first in print or in Google, not using a broad enough search at first, and then filtering by locate or focus with no extra charges, jumping into online case law research first without first scoping out the area of law; not using free resources first (such as at government websites); doing law review research or Federal Register or other research in Westlaw or Lexis instead of in HeinOnline of the CCH database; not asking for help from either Library staff or vendor reference attorneys or asking Library staff if there is a less costly source for getting the same material.

• Not understanding cost effective searching or the difference between Westlaw/Lexis and Google.

• It often takes some time for entry level attorneys to be able to estimate how much searching or printing, for example, will cost to the client. After years of not worrying about that, it is a tricky transition to make.

• This happens less than it used to as incoming attorneys are aware of importance of keeping costs down. West and Lexis do a good job of alerting users of what is outside of our flat rate plans and thus there are fewer surprises.

• They need to ask questions, these contracts are very complex and often something will be in WL or Lexis but won’t be in the
contract because it separately purchased. For example we had an issue with USPQ being pulled through West when they should have used the BNA database.

- Failure to think through the research task before beginning or failure to consult print sources.
- Lack of forethought.
- They have no concept how expensive it is regardless of whether it's hourly or transactional billing. Nor do they realize every little click can cost more money. They also start out too broad i.e. searching all state & federal cases when only need state level cases.
- They either sign on hourly and forget to log out, select the largest databases (ALLFEDS, STATE Cases) for citation look up, or they go outside the contract without checking other sources where we may have the material.
- Rarely happens, but when it does it is a lack of understanding of the contract limits and poor skills with respect to cost effective use of resources.
- We avoid additional costs beyond our flat-rate plan.
- Attorneys do not know what is available to them in print in the firm's library, which is easily accessible. They do not know the limitations of the plan.
- Research beyond the flaw rate, typically investigative research on individuals or companies.
- Not knowing how to use Westlaw. Westlaw does not offer in-person training to our firm. All they have is online tutorials or the toll-free help line.
- We constantly hold seminars on using transaction vs. hourly, and that is where most of the errors take place. Also, reading for hours at a time online.
- Lack of capability of organizing a search.
- Not a problem for us.
- Bad research habits; ignoring warning signals; ignorance of cost effective research techniques; failure to ask the librarian or to call Westlaw when needed.
- Going out of contract, running too many searches on Lexis
- Use after an extremely long period of disuse following training; we do not mandate refresher training yet.
They think it is free like law school. They don’t understand flat rate. They misjudge hourly versus transactional searching.

They are used to having free online research as law students and as clerks and have never learned to search cost effectively.

Not understanding how pricing works; forgetting that they aren’t one the open web; forgetting that they’re using transactional ID; not formulating a precise search before logging on.

Lack of understanding of Locate and Focus features, poor spelling, not knowing what databases to search.

Assuming everything they need from the first step on is available online.

Don’t understand the research topic

Lack of research skills and not understanding how online research costs are charged.

Going outside of the contract. Not realizing they hadn’t logged off. Not understanding the difference between hourly and transactional.

Too used to flat rate access from law school; they search Westlaw and Lexis like they’re running a search in Google—trial and error. They don’t know how to be specific as to what databases they actually need to use. Don’t understand to search with broader search strings, then focus down to save on costs.

Poor research skills.

They do not know what they are doing and they do not ask for help from the law firm librarian, the Westlaw Reference Attorneys or Lexis search assistance.

Lack of understanding of how online charges are accrued, failure to use ref. attorneys or secondary sources before starting fee-based research.

They tend to be pretty careful in how they search, as large online bills are frowned upon suspect that inefficient searching is responsible for most big bills—diving into online sources, rather than searching in the books first to find some good cases.

Using transactional rather than hourly.

Doing ‘new searches’ instead of managing the search effectively. Needing information in out of contract sources.
• Not understanding transactional v hourly; too much printing
• Failure to seek advice before starting a project.
• In general we do not have this issue arise. They are all trained when they start and given the speech in which Westlaw is compared to the drug-dealer, they are not in the schoolyard now, Westlaw is not giving stuff away for free anymore.
• Multiple transactional searches. Not clearly defining the search query before going online. Scorched earth research.
• Searching hourly when they should not and run too many searches rather than creating broader queries.
• Thinking everything will be found in case law and not using other sources. Also, searching the same concept repeatedly instead of using ‘focus’ or find in results of initial search.
• Using databases outside the contract, and inefficient searches.
• Lack of familiarity with other existing totally flat-fee firm contracts. Lack of preparation before going on-line. Lack of knowledge of cost-effective searching techniques, or even when to use transactional v. hourly IDs.
• They have no idea what they are doing because legal research training in law school is practically non-existent.
• Ignoring the warnings.
• Not reading the memo about how online research is charged.
• Research outside of our flat-rate subscription.
• THEY DO NOT DO USE FREE PRINT SOURCES TO FIND OUT ABOUT THE TASK BEFORE THEY LOG ON. THEY DO NOT UTILIZE SOURCES LIKE HEINONLINE EFFECTIVELY. THEY ARE TOO LAZY TO READ—THEY WANT TO SCAN THROUGH ELECTRONIC VERSIONS OF DOCUMENTS ONLY.
• Using Westlaw/Lexis when free (GPO), non-pay-per-use (CCH, Hein), or print sources will do. Flailing during online research and not asking for help soon enough.
• They have no concept of how to set up a search strategy before going online. They do not understand hourly vs. transactional. They use out of contract materials. They do excessive code section printing and charge by document rather than by line.
• Using transactional when they should use hourly, and vice-versa. Using many small searched when they could use one
broad search and focus. Using expensive resources when the info is available at much lower cost, or at no cost. Starting with keyword searches when they should start with the table of contents. Not calling the online reps first.

- They click through warning screens without reading that they will incur additional charges. They don't save their research so they retrieve the same documents repeatedly. They don't refine their searches to get targeted results. They use delivery methods that incur additional charges when they could use their browser's print function.

- Basically repeating the same search over and over in hopes of getting a different result.

- 1) Failing to master WL/Lexis skills because those resources are free to them in law school. They don't know search syntax, fields, operators, and especially they don't use the WL topic/key number system. Most know only pure keyword searching, and don't even know enough to omit stop words like prepositions and articles. 2) Failure to understand that they need some background understanding of the area they are to research, typically from secondary sources, to craft an appropriate search string. Without that background, they don't know the concepts they need to cover or the synonyms/alternate phrasing that courts use to discuss the concepts.

- Not using the print in advance of the online, not initially focusing and planning their research, not having a clear idea of what they need as an end product, selecting too broad a file, using out-of-plan resources, refusing to go to training,

- Some new attorneys forget to check the scope notes for the online database they want to search to make sure the information they are seeking will even be included in the database.

- Unclear about pricing—when to use hourly or transactional access—and more sophisticated search techniques, for ex. rather than starting with a broad search and focusing down, they'll just run additional searches.

- Staying online too long using hourly rates or too many "new searches" using transactional rates. Not realizing that some
research should be started with print resources (or at least online secondary resources).

- Not knowing cost efficient research, assumption of Google to be an authoritative resource, don’t know what a paper book is.
- Lack of understanding in the area or topic being researched. Eagerness to please.
- They do not know how to formulate proper searches and end up running many searches.
- Unfettered access in law school settings which encourage attorneys to use the service without understanding the real costs.
- Spending too much time, running too many searches, not understanding the scope/content of databases, believing everything is accessible online (and searching fruitlessly in multiple databases to find what is not there).
- Understand hourly and transactional billing methods and when it’s appropriate to use each; larger the file = larger cost; no need to “buy” all the search results; be familiar with both services even if there is a personal preference.
- Limited knowledge of the resources available in the database. Not willing to take the time to call Westlaw/Lexis for help.
- Lack of experience in searching; not thinking through the research process; not understanding what they are trying to accomplish.
- Re. Answer to #13 (WL): Certain DBs are outside the flat-rate contract and are charged at retail minus a percentage discount. Some DBs are charged at retail. Re. Answer to #15 (LN): Some databases are outside the flat-rate contract and are charged at retail rate.
- Re. WL Flat Rate contracts (q. 13 comments): Most primary materials are included; treatises, company data, public records and news are extra. Re. LN Flat Rate contracts (q. 15 comments): Primary materials and some news are included; treatises, pub records, court docs are not included.
- Re. #13: There are ancillary items outside of the contract, but constitutes a small percentage of our usage. Re. #15: Unfortunately the Matthew Bender litigation library and CCH and BNA materials are outside of the contract. Courtlink is
outside of the contract.