

## THINK BEFORE YOU TYPE: OBSERVATIONS OF AN ONLINE RESEARCHER

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The prevailing notion among law students is that it's easier and faster to conduct research online, and that everything is online anyway, so why should they bother learning how to research in the books? In contrast, many firms now expect associates or law clerks to utilize some combination of online and print research, because they know what many of us know—there are times when one should use print resources instead of electronic resources, and vice versa. This article addresses some reasons why, and instances when, print resources should be used and what you may do to ensure that your students understand the pitfalls of sloppy research habits.

### Not Everything Is Online

So how much is really on Westlaw® and LexisNexis®? Nearly all current primary U.S. federal and state law is online. However, although there are numerous secondary materials on Westlaw and LexisNexis, there are many others that are unavailable. A large percentage of the approximately 3,600 legal looseleaf treatises listed in *Legal Looseleafs in Print 2004* are not on either service.<sup>1</sup> A good way to help ensure that students

<sup>1</sup> The exact percentage of legal looseleaf treatises that one has access to on Westlaw and LexisNexis varies depending on the contract. For instance, law schools don't have access to CCH or BNA materials unless they pay for premium service, although if you look in the database directories, several of those titles would be listed. Small firm practitioners may have access to only a small piece of either service, and subsequently would have access to a smaller percentage of treatises.

Less than 15 percent of all titles in *Legal Looseleafs in Print 2004* (Arlene L. Eis, comp. & ed. 2004) are listed as being located on either Westlaw or LexisNexis. There were occasions when the compiler did not specifically list a source as being on either service

are not ignoring print resources is to assign a problem where you are reasonably certain the answer is contained in a looseleaf treatise that is not online: find a specific fact pattern in such a treatise and then check online to see if there is a source with a matching pattern. If there is no match, then you have accomplished your goal, and students may well come up with an inadequate answer because they only searched online.

### Diminished Analogical Reasoning

The biggest concern with online legal research is that users often employ sloppy research techniques. At the most elementary level, this is a result of the workings of the search engines. Searches are conducted literally. If you phrase your terms and connectors search query too broadly or too narrowly, or if you misspell a keyword, then the relevance of retrieved documents will be diminished. There are two reasons why relevance may be worse if one conducts a natural language search. First, one does not have the benefit of using connectors when conducting a natural language search, which lessens the ability to determine relationships between search terms.<sup>2</sup> For example, one cannot craft a natural language search to find two keywords within the same sentence. Second, since computers search literally and not conceptually, a natural language search cannot automatically retrieve synonyms.<sup>3</sup> Many

but did note that the title was available through a commercial Web site of a publication owned by the parent corporations of Westlaw and LexisNexis or by a company whose materials typically appear on either service. For instance, some Matthew Bender titles were not listed as being on LexisNexis (even though the same company owns both) but were listed as being on the Bender Web site at <bender.lexisnexis.com>. Other examples were BNA at <web.bna.com>, RIA at <www.checkpoint.riag.com>, and Thomson at <www.thomson.com>. If those sources appeared in the 2003 *Westlaw Database Directory* or the 2003 *LexisNexis Database Directory* then they were added to the initial tallies. Even with the additions, only 15.52 percent of all titles listed in *Legal Looseleafs in Print 2004* were on either service. This rate may be high for most users who likely do not have access to everything that is available in Westlaw or LexisNexis, or both.

<sup>2</sup> See Amy E. Sloan, *Basic Legal Research: Tools and Strategies* 310 (2d ed. 2003). See also Carol M. Bast & Ransford C. Pyle, *Legal Research in the Computer Age: A Paradigm Shift?*, 93 *Law Libr. J.* 285, 299 (2001).

<sup>3</sup> See Sheila E. Desert, *Westlaw Is Natural v. Boolean Searching: A Performance Study*, 85 *Law Libr. J.* 713, 719 (1993). See also John Zeleznikow & Dan Hunter, *Building Intelligent Legal Information Systems* 23 (1994).

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researchers assume that natural language searching automatically adds synonyms when your query is processed. Instead, the user must know to include the synonyms in the search. In fact, natural language searching in Westlaw and LexisNexis basically involves the ranking and retrieval of documents based on the frequency and uniqueness of search terms<sup>4</sup> (other products employ more sophisticated natural language search capabilities). Natural language processing does not assign a legal theory to queries or insinuate relationships between terms.

But at the deepest level, the problem with online research is one of diminished analogical reasoning. Successful research involves both the recognition of facts and the understanding of key legal concepts. Sadly, online researchers tend to rely more heavily on fact-pattern keywords while neglecting the legal concepts of their fact pattern.<sup>5</sup> In an attempt to force students to think about theory, professors often devise fact patterns that suggest, but do not specifically mention, a cause of action. Students often do not include a cause of action in their search query, and their retrieved document pool will include many documents that concern legal issues that are irrelevant to the research problem. Perhaps the problem of relying solely on keywords is most apparent when legal writing professors purposely give their students a fact pattern that is not “on all fours” with any case. Many of my students struggle for several hours to find a case when one on all fours does not exist. Alas, allowing for legal theory in a search isn’t a surefire means of success. After all, we are still depending on the computer, as an intermediary, to retrieve what we’ve requested. The assumptions that we think bind keywords and concepts together are not understood by the literal workings of computer search engines. On the other hand, print indexes and digests are built upon proven legal concepts and terms.

<sup>4</sup> See Morris L. Cohen & Kent C. Olson, *Legal Research in a Nutshell* 83 (8th ed. 2003). See also Jean Sinclair McKnight, *The LEXIS Companion* 49 (1995).

<sup>5</sup> See Scott P. Stolley, *Shortcomings of Technology: The Corruption of Legal Research*, *For The Defense* 39, 40 (April 2004). See also Bast, *supra* note 2, at 297–298.

The altering of the research process may be attributed to the speed and ease with which one can produce a simple list of retrieved documents.<sup>6</sup> It may also be because the normal research process, which requires critical analysis and comparison, is split up by the design of online services.<sup>7</sup> Renowned Stanford law professor and author Lawrence Lessig puts it another way: we are being subject to new laws, called computer code.<sup>8</sup> One prime example of adhering to the laws of the computer at the expense of sound research technique is in the phenomenon of “output overload,” or the retrieval of too many documents for one to reasonably assess.<sup>9</sup> This causes some users to arbitrarily add keywords to the initial search query (or to use connectors that are too restrictive) so as to limit the number of retrieved documents they have to look through. The result is the retrieval of fewer relevant documents. I constantly observe this strategy and I spend the whole semester trying to change that habit by showing my class a comparison of documents retrieved via a search that is too restrictive and one that isn’t. From day one I also stress the importance of starting with a broad search so as not to miss the retrieval of relevant documents.

There is the argument that digitized storage actually expands the user’s ability to find relevant materials because the user has the immediate ability to search the whole database, whereas one who uses the print indexes is confined to the parameters set by someone else.<sup>10</sup> This argument assumes that online research is being conducted correctly, and thus fails in practice. If the researcher is unfamiliar with an area of law, the best strategy is to start by using the books where

<sup>6</sup> See J.D.S. Armstrong & Christopher A. Knott, *Where the Law Is: An Introduction to Advanced Legal Research* 100–101 (2004).

<sup>7</sup> See Richard Haigh, *What Shall I Wear to the Computer Revolution? Some Thoughts on Electronic Researching in Law*, 89 *Law Libr. J.* 245, 249 (1997).

<sup>8</sup> See Lawrence Lessig, *Code and Other Laws of Cyberspace* 6 (1999). See also Bast, *supra* note 2, at 286.

<sup>9</sup> See Jon Bing, *Performance of Legal Text Retrieval Systems: The Curse of Boole*, 79 *Law Libr. J.* 187, 197–201 (1987) for a good explanation and discussion of output overload.

<sup>10</sup> See Gordon Russell, *Re-Engineering the Law Library Resources Today for Tomorrow’s Users: A Response to “How Much of Your Print Collection Is Really on WESTLAW or LEXIS-NEXIS?”*, *Legal Reference Services Q.* Nos. 2/3, 2002, at 29, 37.

the enhanced ability to browse and cross-reference, and the availability of theory-based indexes and digests, should lead to a better understanding of the legal concepts involved.<sup>11</sup> Immediately jumping online has caused more than one uninitiated law clerk or associate to incur thousands of dollars of excess research costs because it took a lot of trial and error to find the material online.

It's often easier to conduct statutory research in the books.<sup>12</sup> This is partially a browsing issue in that it's just not as easy to move between code sections online<sup>13</sup> as it is when using books, which makes it harder to see the relationship between code sections within an act.<sup>14</sup> If you miss the connection between code sections, you could make grave errors in your research. One of the most common mistakes that my students make is failing to determine the relationship between various sections of an act, or for that matter even realizing that code sections do not stand alone. If they don't see that relationship, which is easy to do if conducting full-text searches, they've opened themselves up to committing error. For instance, students in the past have erroneously applied the penalty section of an act without bothering to read the preceding section that laid out the exceptions to the penalties, one of which my fact pattern specifically included. The best way to determine the relationship between code sections is to view the act's table of contents or to page through all sections of the act, which you can easily do in the print version of the code. The process online simply cannot replicate the ease with which it's done in print. The ability to browse becomes of magnified importance in code databases, which are notorious for using esoteric language, which is particularly difficult to allow for in a search query.

Statutory research is also difficult to conduct online because of a lack of understanding as to the differences between annotated and unannotated

codes. Unannotated codes focus on the statutory language. If you need to retrieve specific statutory text but conduct your search in an annotated database, you're in for a lot of work sorting through documents that were retrieved because your terms occurred in the often-voluminous annotations. If you need to find an interpretation of code text, you need to search the annotations following each code section for cases or secondary sources.

I have my students perform secondary source and code assignments (federal and state) both online and in print resources so they see firsthand the benefits and liabilities of both. The comment that I hear most often is how much easier it is to use the books. Those assignments are not crafted in a vague manner so as to play to the strength of books over online sources. However, if you would like to accentuate the differences between the two, you could craft a fairly vague problem. Chances are that your students will have a much more productive time using the print resources.

### Limited Browsing Capabilities

The customary method of starting a research project using print resources is to look up specifically chosen legal concepts, keywords, and phrases in a secondary source index while watching along the way for better or alternative terms or phrases. It is both an opportunistic and conceptual approach. Being able to browse an index or table of contents adds necessary breadth to the research process.

In an attempt to mimic the ability to browse materials more like one can do with print resources, Westlaw and LexisNexis have added tables of contents to many databases. This is a major improvement. However, you'll find that the online tables of contents may not be as easy to navigate as their print versions are: you may have to click several times in order to arrive at the desired destination and there is an increased likelihood that you will lose track of where you are along the way.<sup>15</sup> Browsing capabilities online are nonexistent if one conducts a full-text database

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<sup>11</sup> See Josh Blackman, *How to Use the Internet for Legal Research* 73 (1996). See also Sloan, *supra* note 2, at 334, 336.

<sup>12</sup> See Sloan, *supra* note 2, at 334, 336.

<sup>13</sup> Moving between successive code sections in LexisNexis is accomplished by using the Book Browse function, and in Westlaw is accomplished by using the Documents in Sequence (Docs in Seq) function.

<sup>14</sup> See Sloan, *supra* note 2, at 336.

<sup>15</sup> See John K. Hanft, *A Model for Legal Research in the Electronic Age*, Legal Reference Services Q. No. 3, 1999, at 77, 79.

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search. The only “browsing” one can do in this instance is confined to analyzing retrieved documents.

A good way to make sure that your students become familiar with and fully utilize the online browsing functions is to assign a problem in a database that has a table of contents, such as *American Jurisprudence 2d*, and where the answer may be fairly intuitive to find in the table, but which is likely to be more difficult to find when performing a full-text search. Consider this example: may an owner recover damages for emotional distress for injuries inflicted to her cattle? It should only take a minute or two to answer this question using the *American Jurisprudence 2d* table of contents. However it may take quite a bit longer to answer if students do not include *livestock* or *animal* in their full-text search query. A good in-class exercise is to instruct some students to perform a research problem using a full-text online search while others perform the same problem using a print index or an online table of contents. Compare the time it takes both groups to find an adequate answer.

### Database Currency Issues

Users assume that if a source is online then it is up-to-date with current laws. However, that’s not always true. The obvious example is older law review articles, which users forget may be based on old law. However, state secondary legal materials may not be updated every year.<sup>16</sup> If the publisher doesn’t update the source every year then it won’t be updated just because it’s on Westlaw or LexisNexis. You will often see an update date near the top of retrieved documents, just under the document title. However, you’ll also find a current copyright year in all databases in both services. To avoid relying on outdated material, I admonish my students to pay attention to the update date and to check more than one secondary source before moving on to primary materials and citator services.

<sup>16</sup> For instance, I looked at the CEB’s *Handling Construction Disputes* database on LexisNexis on June 23, 2004, and it was updated through Spring 2002. On that same date, I also looked on Westlaw and found that *Settlement of Estates in Connecticut* was last updated January 2003. It is possible that new laws have made some parts of these sources outdated.

Students may be tested on their ability to recognize outdated material if you craft an issue that is answered one way in an outdated law review article and in the correct, but less direct way in a current secondary source. There are several areas of law that you can readily identify as having changed over the last few years, such as cyberlaw and communications. Thorough students will recognize outdated material if they research in more than one secondary source database and if they use a citator service before relying on any primary authority garnered from their secondary source research. I include this type of exercise at least once each time I teach a course, and it is definitely a teachable moment when you review the question in class.

### Time

Most students feel that it’s always faster to conduct research online as opposed to in the books. In several classes of my electronic legal research course, I have students conduct both online and print research using the exact same fact pattern. Some students are given the print research exercise first and often finish it quicker than they subsequently finish the same research issue online. Although there are many factors that determine if print or online research is quicker to use, my experiences indicate that it’s often at least as quick to conduct research in print resources assuming that one has close access to both. For the reasons mentioned previously, unless you have a highly refined idea as to what you are to look for, it will probably be quicker to conduct research in the books. In addition, the esoteric language found in statutes makes for quicker research in print resources. On the other hand, if you have a citation and need to retrieve the corresponding document, or if you are looking for a specific phrase, it’s very quick to do so online.

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## Cost

Access to Westlaw and LexisNexis in a firm setting can cost several thousand dollars per month (large firms) whereas you may have close access to a library's collection of books for little or no cost. In addition, you have to be on your toes when conducting online research or else you will incur excessive database charges beyond what the firm's contract covers. For example, your company's pricing plan may include unlimited Shepardizing™, but may not encompass the cost associated with opening certain documents linked from within the Shepard's® results. So you may incur an unexpected extra charge by opening a case that perhaps distinguished or explained an issue in the Shepardized case. You may have to determine the cost-effectiveness of conducting research on a per-minute basis or by the transaction; how much it costs to conduct a search in various databases; how much it costs to Shepardize®; the cost of retrieving documents by citation; printing costs; etc. Unless students are taught the pricing basics before graduating, they may have to learn by trial and error in their first employment setting. Finally, as the giant legal publishers acquire more and more legal titles, you'll have to pay for a subscription to both Westlaw and LexisNexis if you want the majority of the major federal and state law treatises.

I use many assignments in the courses that I teach. A great way to bring home the costs of conducting online research is to show students a range of how much money each potentially billable task will cost them as you review the assignments in class. Even if it's a broad range, students quickly get the message. Students are aghast when I do this for the first time each semester.

## Conclusion

One cannot usually plop down in front of a computer, log on to a legal service of choice, run a quick search, and live happily ever after. Unfortunately, such is the mindset of so many of our students. The efficient online researcher must be aware of the nuances and limitations of the online services. Online legal research is a valuable tool, but it must be both fully understood and used in the proper combination with print research. Adequate teaching requires unconventional methods, lots of work, and plenty of patience—but the effort is worth it.

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Please note that beginning with volume 1, all issues of *Perspectives* are available in the Perspectives database (PERSPEC) on Westlaw and in the LEGNEWSL, TP-ALL, and LAWPRAC databases. *Perspectives* is also available in PDF at [west.thomson.com/customerservice/newsletters/perspectives](http://west.thomson.com/customerservice/newsletters/perspectives).

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