Embedded Librarians: Teaching Legal Research as a Lawyering Skill

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By

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I. Introduction

The need to reform the teaching of advanced legal research as a lawyering skill is abundantly clear, as evidenced in surveys of law practitioners and firms,1 law school librarian programs to provide bridge-the-gap training for students going into summer jobs,2 measures taken by the ABA to emphasize the importance of legal research skills,3 and as documented in the legal research literature.4 Scholars have in recent years been addressing this need by developing a pedagogy for teaching legal research, building on the recommendations of the 2009

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2 E.g., the New Jersey Law Librarians Association sponsors an annual “Bridge the Gap” training program for rising summer associates. 98 LAW LIBR. J. 783, 796 (2006).

3 In 2005, the ABA amended Standard 302(b)(2)(i) to include the learning outcome of legal research skills (“learning outcomes shall include competency as an entry-level practitioner in . . . legal analysis and reasoning, critical thinking, legal research, problem solving, written and oral communication in a legal context”).

Boulder Statement on Legal Research Education,⁵ the 2007 Best Practices for Legal Education,⁶ and the Carnegie Foundation Report, 2007 Educating Lawyers.⁷ This recent scholarship has emphasized the importance of the first year of law school in educating students for the profession of law. The 2007 Carnegie Report, Educating Lawyers,⁸ in particular focuses on the transformative experience of the first year because, by the end of it, most law students “have developed a clear ability to reason and argue in ways distinctive to the American legal profession.”⁹ Hence, recent scholarship on legal research pedagogy focuses on how legal research is taught in the first year.¹⁰ Yet it is in law school clinics, in the second and third years of law school that students are for the first time exposed to a formal practice environment of legal problem solving requiring both knowledge of law and lawyering skills, including the skill of legal research.¹¹ Here the opportunity arises for teaching students advanced legal research skills such as how to search or think in terms of devising a research plan, evaluating results from online research services, using databases relying on algorithms versus human indexed resources

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⁵ www.colorado.edu/law/events/legalResearchEducation.pdf
⁶ ROY STUCKEY ET AL., BEST PRACTICES FOR LEGAL EDUCATION (2007)
⁸ Id.
⁹ Id. at 2.
¹⁰ This has not always been so. Berring and Vanden Heuvel passionately contended that teaching legal research in the first year was teaching “the wrong people the wrong material at the wrong time” and recommended instead that legal research education should begin in the second year of law school. Robert C. Berring & Kathleen Vanden Heuvel, Legal Research: Should Students Learn It or Wing It? 81 LAW LIBR. J. 431, 441-42 (1989).
¹¹ See, e.g., Carolyn R. Young & Barbara A. Blanco, supra n. 1 (discussing the inadequate preparation of law students for externship and clinical experiences); Randy Diamond, Advancing Public Interest Practitioner Research Skills in Legal Education, 7 N.C. J.L. & TECH. 67, 132 (2005) (recommending librarians teach advanced research skills “in the classroom portion of the clinic”).
or vice versa, learning how to research for analogous law, for extra-legal resources, for unwritten rules and practices or custom, and for attaining social justice goals.

The pedagogical challenge of teaching advanced legal research lies in the abundance of online information available to the researcher, both legal and nonlegal. For law students, the first year instruction in basic legal research methods and resources offers no guide for addressing the unorganized mass of information available, evaluating it, and its source, in order finally to solve particular legal problems. In contrast to the print information world where the West topic and key number system provided a guide and structure for research that correlated with the subject matter courses taught in law school, online information appears to be unstructured, confusing and unmanageable. Without a way to comprehend, organize and analyze the masses

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12 Susan Nevelow Mart, *The Relevance of Results Generated by Human Indexing and Computer Algorithms: A Study of West’s Headnotes and Key Numbers and LexisNexis’s Headnotes and Topics*, 102 LAW LIBR. J. 221, 249 (2010) (concluding that “[w]here the search process has more human intervention, it appears to deliver better results”).


14 Valentine, *supra* n.4; See, e.g., *Brown v. Board of Education*, 347 U.S. 483 (1954) for use of non-legal argument to change the law.


18 Id.

19 Id.
of information available, researchers can be overwhelmed,\(^2\) seeing no implicit structure in the information they find by descriptive word searching.

This article addresses how law school librarians can teach advanced legal research beyond simply offering courses, individual conferences or workshops, research guides and portals. It examines how the relatively new trend of embedding\(^2\) librarians in practice settings, offering assistance at the point of need, could be effective in law schools. It focuses particularly on embedding librarians in law school clinics, where they can provide instruction and support as students wrestle with finding and applying the information needed to represent clients. It begins in Part II with a brief overview of the current methods used in teaching legal research to first year law schools, where the foundation is laid for this important lawyering skill, and the influence of Marjorie D. Rombauer’s groundbreaking process approach to teaching legal research in her 1973 text, *Legal Problem Solving: Analysis, Research and Writing*. Part III examines some of the recently published work on developing pedagogies for legal research instruction, particularly Callister’s Adapted Taxonomy,\(^2\) based on Bloom’s Taxonomy,\(^2\) to see how their categorization of knowledge and its acquisition can be used together with Rombauer’s process method of teaching legal research as a lawyering skill\(^2\) in the practice setting of law school clinics. Part IV proposes a model for teaching advanced legal research by

\(^{20}\) Valentine, *supra* n. 4.

\(^{21}\) The embedding metaphor was first used to refer to integrating journalists into combat units during the Iraq War.


\(^{23}\) TAXONOMY OF EDUCATIONAL OBJECTIVES: THE CLASSIFICATION OF EDUCATIONAL GOALS (B.S. Bloom ed. 1956).

\(^{24}\) A.B.A. TASK FORCE ON LAW SCH. & THE PROFESSION, LEGAL EDUCATION AND PROFESSIONAL DEVELOPMENT – AN EDUCATIONAL CONTINUUM 135 (1992) (hereinafter MacCrate Report) (including legal research as a fundamental lawyering skill of identifying legal issues and researching them “thoroughly and efficiently”).
embedding law librarians in law school clinics based on the experiment conducted at the UDC David A. Clarke School of Law, begun by first embedding one librarian in the Juvenile and Special Education Law Clinic and then continued by adding on other clinics. This article concludes that the Rombauer Method of teaching legal research can be expanded to include teaching research for analogy and social justice, and that the experiment of embedding librarians in the law school clinic is a very promising and doable avenue for teaching advanced legal research as a lawyering skill consonant with the recommendations of the Boulder Statement on Legal Research Education.25

II. Legal Research Instruction

Law students have been taught legal research for at least the last forty years by either of two competing models, the process and bibliographic methods. The two methods are not mutually exclusive. Although legal research can be taught as a stand-alone course, it is frequently taught as part of a process of legal problem solving, i.e., it is a component of a combined legal research and writing course, often with a much heavier emphasis on the legal writing component. The bibliographic method of teaching legal research relies more on learning the legal resources available and how to use them. Although seldom used in first year legal research courses, many of the pre-eminent legal research treatises and manuals express a bibliographic approach in their titles such as Finding the Law26 and How to Find the Law.27 In stand-alone courses or workshops, the bibliographic method of teaching legal research has often

25 Supra n. 5.
relied simply on rote learning of sources through simple finding exercises in the library and databases.\textsuperscript{28}

Current methods of teaching legal research in the first year of law school, as expressed in the titles of some legal research and writing textbooks, characterize legal research as part of a process including problem-solving, research, and development of written work products such as briefs and memoranda. The dominance of this method of teaching legal research reflects the influence of Rombauer’s innovative 1973 text, \textit{Legal Problem Solving: Analysis, Research and Writing}.\textsuperscript{29} Rombauer’s work, and that of her successors,\textsuperscript{30} recognizes that the lawyer’s expertise and skill in analysis, legal research and legal reasoning are inextricably combined in the legal problem-solving process, as it is performed at the professional level. Rombauer explicitly sets forth this concept in the first part of \textit{Legal Problem Solving}, titled “Interpreting and Predicting the Controlling Law.”\textsuperscript{31}

\textbf{A. The Rombauer Method}

The Rombauer Method is a straight forward process method approach intended to be used for the teaching of legal research and writing, as a combined pedagogy, to first year law students. Rombauer meticulously provides instruction on how to analyze, evaluate and

\begin{itemize}
  \item \textsuperscript{28} Robert C. Berring & Kathleen Vanden Heuvel, Legal Research: Should Students Learn It or Wing It? 81 LAW LIBR. J. 431, 448 (1989) (arguing that an integrated bibliographic method” is an excellen way to teach legal research).
  \item \textsuperscript{29} MARJORIE D. ROMBAUER, LEGAL PROBLEM SOLVING: ANALYSIS, RESEARCH AND WRITING (1973). Prof. Rombauer developed her process of teaching legal research, analysis, and writing in the 1960s at the University of Washington, where she taught creditor-debtor law, legal drafting, and secured transactions, \textit{Mary S. Lawrence, An Interview with Marjorie Rombauer}, 9 LEGAL WRITING: J. LEG. WRITING INST. 19 (2001) (hailing Prof. Rombauer as the founder of teaching legal research and writing as a professional discipline). Prof. Rombauer was honored with the University of Washington School of Law Distinguished Service Award and the Association of American Law Schools Award for Distinguished Service to the Profession. \textit{Id}.
  \item \textsuperscript{30} See, e.g., CHRISTINE KUNZ ET AL., THE PROCESS OF LEGAL RESEARCH (2004); AMY SLOAN, BASIC LEGAL RESEARCH (2006); and also TEACHING LAW.COM, an ebook, by DIANA DONAHOE.
  \item \textsuperscript{31} LEGAL PROBLEM SOLVING: ANALYSIS, RESEARCH AND WRITING 29 (4\textsuperscript{th} ed. 1984) ___.
\end{itemize}
synthesize case law; analyze and construe statutes as well as the cases construing the statutes; and develop and carry out a research plan, incorporating instruction on finding and using the major legal resources as part of this process. This method assumes that students will learn the complexities of legal research as they work through practical problems in legal problem solving and produce a written legal document. This model is still hotly debated as many academics believe that first year students need to master the broader concepts of the law before tackling the finer details of research while the others believe that the first year is the time when law students are more malleable and better able to internalize the concepts of research as it relates to the law.

The methodology and underlying pedagogy of Rombauer’s process approach to legal research instruction are similar to those advocated in Educating Lawyers. Students are introduced to model documents characteristic of professional trial practice. They are coached in how to analyze law, perform research and produce similar legal documents. Concepts are reiterated with every assignment as students move from simple case briefs for classroom preparation through analysis of a published casenote and preparation of trial and appellate documents. In other words, the Rombauer method and its progeny appear to anticipate the pedagogical techniques advocated in Educating Lawyers, including modeling, practice, scaffolding, feedback, coaching, and iteration. Rombauer’s course book includes the most detailed and sophisticated presentation of legal analysis from precedent necessary to perform legal research at the professional level of practicing attorneys. It is not a book or method widely used in first year legal research and writing programs, although Rombauer’s influence is

32 See, e.g., Berring, supra n. 26.
33 See, e.g., Carnegie Report, supra n. .
34 Id. at
detectable in the nods to process in current legal research and writing texts and manuals, as is
demonstrated in the typical examples reviewed in the next section.

B. Selected Current Texts for Teaching Legal Research

Publications for teaching legal research and writing in law schools are so numerous as to be impossible to review in their entirety for this article. The selected printed materials chosen here are in use in enough law schools as to be representative examples of both the bibliographic method and Rombauer’s Method. The one e-book or online program for teaching legal research and writing is also briefly examined as similarly following in the wake of Rombauer’s Method.

1. *The Process of Legal Research*

As the title implies, *The Process of Legal Research* by Christine Kunz et. al.,\(^{35}\) encapsulates a process based method approach to legal research. The book presents its user with the “Canoga case,” a hypothetical situation in which a flutist for a small orchestra seeks resolution over her termination from that orchestra. The user of this system is then cast in the role of Ms. Canoga’s attorney and begins the process of walking through the resources for legal research using the “Canoga case” as an anchor point and as thread of continuity in the process. As the user progresses through the sections on commentary, case law, enacted law, administrative law, and rules of procedures and legal ethics, the resources and materials presented are applied to the hypothetical. Each chapter utilizes a series of templates to illustrate and instruct on the usage of the pertinent resources and materials as applied to the fact pattern. The book concludes with a short unit on research journals. This process based pedagogy is thorough and complete. It focuses on how to develop strong research practices in the solution of

a single, unified, complex problem and it successfully integrates print and electronic research strategies. One possible drawback to this text is that while the one case example unifies the process it also creates an artificial research environment for the student.

2. Basic Legal Research

*Basic Legal Research* by Amy Sloan\textsuperscript{36} follows the bibliographic approach to teaching legal research. The substantive material of the book begins on chapter 2 with a short introduction to a method of preliminary analysis through the generation of search terms. The next chapters are dedicated to an exposition of the different materials covering primary and secondary sources. These chapters illustrate those resources as well as explain how to use them in the context of legal research. Even though Sloan includes examples of electronic materials in the chapters covering primary and secondary resources, she addresses the topic of electronic legal research as a separate issue in chapter ten of the book. The last chapter of the book is dedicated to the issue of research planning. The book is not organized in a sequential manner and Sloan says in her introduction\textsuperscript{37} (pg.22) that the legal research instructor is free to follow her own sequence of assignments when using it. *Basic Legal Research* provides clear, step-by-step instructions on how to use legal resources but it does not integrate those resources into a process. A legal research instructor using these materials would need to create a cohesive plan of implementation to make the materials presented have any relevance to students.

\textsuperscript{36} Amy E. Sloan, *Basic Legal Research: Tools and Strategies* (4\textsuperscript{th} ed. 2009).
\textsuperscript{37} *Id.* at 22.
3. Teachinglaw.com

*TeachingLaw.com*, by Diana Donahoe, is the ebook (electronic book) twist on legal research and writing texts. This e-book follows a bibliographic approach to legal research but it exploits the flexibility of the electronic medium by offering a series of companion exercises and tutorial which each topic covered, giving the whole effort a process method flavoring. The approach here is more legal writing centered and the emphasis is given over to that topic. There are short research exercises included with the sections that reinforce the materials described there and that support the process method flavoring of the e-book. There are also links to Georgetown Law Library produced tutorials on several topics allowing the users to have a more interactive experience with the material. The true emphasis of this work in legal writing and it appears to be a very effective tool but a more process centered method would have made it even stronger.

C. Critiques of Legal Research Teaching

Despite the promise of the process approach to teaching legal research, it has not yielded a high level of skill in law school students and graduates. There is a consensus in the legal practice community that these pedagogies are not accomplishing the desired results. Why then do most law students, after a full year of instruction in legal research and writing know so few of the legal resources they should be able to use or, after very brief exposure to some basic resources, do not really know how to use them for research, or have only basic knowledge of legal resources and how to use them. In other words, they do not reach a professional level of expertise, nor do they identify legal research as an essential lawyerly skill informed by legal ethics.

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38 DIANA DONAHOE, TEACHINGLAW.COM (2006)
39 See supra nn. 1-4.
40 Id.
In defense of the problem-solving approach, as incorporated in many legal research and writing courses, it can be said that too often these courses focus on legal writing, require application of too few legal sources, and employ only basic legal research strategy. Even in the best environments for learning legal research in law school, however, little or no attention is given to some challenging aspects of legal research, such as learning how to evaluate online results produced by algorithms versus results from indexing by human beings, how to conceptualize analyze legal problems in order to extract and organize terms for research, or how to organize research into manageable units, researching first the general issues and then “moving to narrower and narrower issues.” And little or no attention is given to legal research strategies that call for finding useful policy or analogous precedent or research that can support creation of new legal theory. In sum, what first year legal research and writing courses teach is insufficient for law students to graduate with the skill set of professional researchers, such as the Legal Research skills identified in the American Bar Association MacCrate Report (1992) which states:

In order to identify legal issues and to research them thoroughly and efficiently, a lawyer should have:

3.1 Knowledge of the Nature of Legal Rules and Institutions

3.2 Knowledge of and Ability to Use the Most Fundamental Tools

of Legal Research

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41 Callister, supra n.22, at 206.
42 Id.; Brooke Bowman, Researching Across the Curriculum: The Road Must Continue Beyond the First Year, 61 Okla. L. Rev. 503, 554 (2008) (noting that unless students have taken advanced legal research courses they will not be “introduced to the resources that attorneys actually use in the real world: resources such as loose leafs, form books, treatises, continuing legal education materials, advanced database content, and interdisciplinary materials”)
3.3 Understanding of the Process of Devising and Implementing a Coherent and Effective Research Design.

D. A Response

Current methods of teaching legal research as expressed in the titles of some legal research and writing textbooks view legal research as a process including problem-solving, research, and development of work products such as briefs and memoranda. In practice, they still rely most heavily on presenting basic legal resources and explanations of how to use them, giving scant attention to the process of legal research and analysis described in the Boulder Statement and as analyzed in the recent taxonomy proposed by Professor Paul D. Callister. In contrast, Rombauer’s presentation of legal research as an integrated problem-solving process of legal analysis, research and writing stands out as an early (1973) exemplar of just this kind of teaching. Her text Legal Problem Solving, however, has not been adopted generally by legal research and writing programs and is not discussed in the legal research and writing literature. One of the issues that has hindered understanding and appreciation of the Rombauer Method is the intellectual density of Legal Problem Solving and selection in the first editions of archaic cases as examples. The message of Legal Problem Solving is viable but the delivery has hindered its acceptance. Rombauer’s method has also been criticized because she wrote before the advent of generalized electronic research and is not therefore adaptable to online research media. But the Rombauer Method is just that, a method or schema to teach legal research as a lawyering skill in an effective, cohesive manner and it is adaptable to any variety of legal

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44 Prof. Rombauer anticipates the emphasis in Prof. Callister’s taxonomy of the need for a conclusion, stating “A prediction will not be sufficient to solve most problems . . . . Advice must be communicated and implemented, which may require writing, drafting, counseling, negotiation, litigation, lobbying, or other activities.” Supra n.31 at 2.
resources. The argument that now researchers have the ability to retrieve masses of case law, persuasive precedent, minor cases, etc., for which first year students cannot use the Rombauer Method because they don't know how fit all that material into a synthesis of case law does not hold up. If taught correctly the Rombauer Method provides the framework to synthesize and can be applied no matter the volume or type of resources available or media used. Her method or schema for problem analysis, research and problem solving are the foundation for, and transferable to, addressing the challenges of reasoning by analogy and for transformative change in the law

**Part III. Legal Research Pedagogy**

The Carnegie Report asserts that students learn substantive law best when it is taught together with lawyering skills in the first year curriculum, and they offer as an example the teaching of legal writing as simulated practice with instruction, feedback and support from instructors. Of course, for many years first year legal research has been included in legal writing courses as well and their legal research texts do include basic instruction in how to use the most commonly used legal research sources, along with some brief instruction in legal research problem solving. These courses, however, do not appear to address what Callister has called higher order thinking, of a kind demonstrated, for example, in Rombauer’s *Legal Problem Solving*. This is not surprising given that the legal research literature reveals no scholarly examination of Rombauer’s approach to teaching legal research and, similarly, until recently little or no scholarly work has developed a pedagogy or a taxonomy for legal research instruction.

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46 Carnegie Report, supra n. , at 104-111.
47 In his search for a pedagogy for teaching legal research as a lawyering skill, Callister found fewer than half a dozen articles that addressed pedagogy in any way. Paul D. Callister, *Time to
Planning a program of legal research instruction aided by a taxonomy has the advantage of assuring that the pedagogical methods developed can be assessed and evaluated. Similarly, it can be used for planning instructional activities and assessment that are “congruent with one another” – i.e., it can be used to evaluate whether and what learning takes place in the course. Fortunately, in the past decade increasing attention has been given to creating a legal research pedagogy. Subsequent to publication of the Carnegie Report, librarians developed the Boulder Statement, and Callister proposed a taxonomy of legal research knowledge based on Benjamin Bloom’s Taxonomy of Educational Objectives. Callister chose to work with Bloom’s Taxonomy because it is one of the most favored education taxonomies and it had already been identified in 1996 by Canadian law librarian Maureen Fitzgerald as adaptable for legal research.

_Blossom: An Inquiry into Bloom’s Taxonomy as a Hierarchy and Means for Teaching Legal Research Skills, 102 Law Libr. J. 191 (2010)_

48 EDUCATION ENCYCLOPEDIA: TAXONOMIES OF EDUCATIONAL OBJECTIVES, BLOOM’S TAXONOMY, at http://www.answers.com/topic/taxonomy-of-educational-objectives, visited 9-11-10. While a taxonomy for legal research instruction is useful in planning what to include in legal research instruction generally and how to evaluate the course design as well as assess outcomes, the actual content of the course depends on the selection of legal research competencies to be included. At present the only “official source” for competencies is the AALL-RIPS publication titled Core Legal Research Competencies: A Compendium of Skills and Values as Defined in the ABA’s MacCrate Report. Research Instruction Caucus, Am. Ass’n of Law Libraries (Ellen M. Callinan ed., 1997), available at http://www.aallnet.org/sis/ripssis/PDFs/core.pdf. It has been criticized, however, for focusing more on the resources available for researchers than on “higher levels of thinking skills.” Callister, supra n.22. And, in 2009, AALL charged a Joint Committee on Articulation of Law Student Information Literacy to draft standards which could be used in teaching legal research. Id. at Until these standards are published in final form, however, AALL’s Core Legal Research Competencies is still the most comprehensive resource available for teachers of legal research.

49 TAXONOMY OF EDUCATIONAL OBJECTIVES: THE CLASSIFICATION OF EDUCATIONAL GOALS; HANDBOOK 1: COGNITIVE DOMAIN (Benjamin S. Bloom ed. 1956) [hereinafter called Bloom’s Taxonomy].

50 Maureen F. Fitzgerald, _What’s Wrong with Legal Research and Writing? Problems and Solutions_, 88 Law Libr. J. 247 (1996). And it had been explored by Kurt M. Saunders and Linda
Callister also analyzed the 2001 adaptation of Bloom’s Taxonomy, *A Taxonomy for Learning, Teaching, and Assessing*, edited by Lorin W. Anderson and David R. Krathwohl, and then constructed his Adapted Taxonomy for legal research instruction. All the taxonomies are cognitive, that is, they all focus on knowledge and how it is attained. They all have six categories, beginning with knowledge or some equivalent phrasing followed by five categories of processes involved in gaining knowledge. While Bloom labeled the categories with nouns -- knowledge, comprehension, application, analysis, synthesis and evaluation -- the categories all refer to a dynamic and fluid process. Hence Anderson and Krathwohl, and also Callister, preferred to use verbs to label most of the categories illustrating “the cognitive process dimension,” Callister naming them Remembering, Understanding, Application, Analysis and Synthesis, Concluding and Metacognition. See Fig. 1.

Anderson and Krathwohl also explicitly recognize different “Types of Knowledge,” including factual knowledge, conceptual knowledge, procedural knowledge, and metacognitive knowledge. See Fig. 3. These are useful in analyzing the types of knowledge required of an expert legal researcher but do not provide specific information as to what to teach in an actual legal research practice setting such as a clinic.

Levine in 1994. Kurt M. Saunders and Linda Levine, *Learning to Think Like a Lawyer*, 29 U.S.F. L. REV. 121 (1994). Bloom himself considered his taxonomy as a starting point model for others, stating in a 1971 memorandum, “Ideally each major field should have its own taxonomy in its own language – more detailed, closer to the special language and thinking of its experts, reflecting its own appropriate sub-divisions and levels of education, with possible new categories, combinations of categories and omitting categories as appropriate.” *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom’s Taxonomy of Educational Objectives* (Lorin W. Anderson and David R. Krathwohl, eds. 2001) [hereinafter 2001 Revised Taxonomy].

51 *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom’s Taxonomy of Educational Objectives* (Lorin W. Anderson and David R. Krathwohl, eds. 2001).

52 *Id.* at 28.
Callister’s subcategories are tailored specifically to the kinds of knowledge possessed by an expert legal researcher. The subcategories are instructive for legal research pedagogy because they describe what a legal researcher must be able to do in terms of thinking about which resources to use, how and when to use them, and how to manage the research process so that a concluding result can be reached offering a professional opinion on a particular issue. For example, the Adapted Taxonomy says the expert researcher will master “technical [bibliographic] language” and “controlled vocabularies,” but in addition he or she will be able to move “beyond the parts of the problem and look for relationships to other issues, resources, alternative scenarios for analysis, and possible options as solutions.” And above all the researcher will be able to “assess, not only the result, but the schemata, including the processes leading to the result.” See Fig.2.

Callister’s Adapted Taxonomy is designed for use in legal research instruction, which would include instruction throughout law school. Most of the examples and explanations, however, relate to matters taught most often in the first year legal research and writing courses. In this paper, we accept Callister’s Adapted Taxonomy as useful for first year legal research instruction. We examine it now, however, in the context of legal research instruction in the second and third years of law school, and specifically in law school clinics.

Practicing legal research as an integral part of lawyering skills in practice settings provided in the second and third year of law school should expose the law student to more complex research problems. The legal research process taught in first year courses is primarily confined to legal reasoning from precedent. In other words the research aims to discover the law

53 Callister, supra n.22.
54 Id.
55 Id.
and custom applicable to the research problem. To do so, he or she learns skills of legal analysis, develops knowledge of legal systems and legal resources, learns bibliographic skills such as evaluating research sources, differentiating between sources mediated by human beings versus mediated by computer algorithms, *etc*.

But legal reasoning from precedent is not the only kind of research skill required in lawyering. In fact this skill has been attacked as no longer relevant because of the prevalence of a sea of undifferentiated information that can overwhelm new researchers and as “eroding the foundational structure of the American legal system.”

Professor Sarah Valentine has in fact urged that “reconstructing legal research” instruction can “provide students the skills necessary to understand and manage the explosion of information currently swamping the law.”

The overwhelming amount and kinds of legal information available through online searching is, however, manageable for researchers with sufficient legal research instruction. Callister, for example, notes that the useful concepts of precision and recall “from the library and information sciences. . . . can help students understand some of the pitfalls of electronic research.” Similarly, students who understand the difference between Boolean and Natural Language searching can also evaluate information better in order to narrow results for relevancy.

It is important to remember, however, that discovering the law, analyzing it, synthesizing it (in Rombauer’s language, a different meaning from when Bloom says “synthesize”) is the first step in legal research – basically analyzing from precedent or lack of it. When Callister talks

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56 Valentine, supra n. 4, at 175.
57 *Id.* at 176.
58 *Id.* at 202 (noting that “precision measures the relevancy of results from a search, but recall measures what was missed” and provides the formulas for both relevancy and recall).
59 For a discussion of teaching legal research from the formalist perspective of reasoning from precedent, see Thomas Michael McDonnell, *Playing Beyond the Rules: A Realist and Rhetoric-*
about the researcher recognizing what he/she does not know, being “on the edge of one’s construct (or schema) of reality”\textsuperscript{60} – he’s talking about the researcher keeping in mind that there is probably law, and also custom, and solutions, in the research universe that he/she does not know about. So a good researcher must acknowledge and challenge the edge of his/her own unknowing by following a rigorous process of research in the hope it will reveal what is unknown to the researcher.

The research process taught in most first year legal research and writing programs, analyzing from precedent, however, is not necessarily sufficient for all research problems, e.g., where there is no precedent available, where the law is out of joint with the times, where social justice will be thwarted. Here is where the concept of analyzing from analogy comes up. Weinreb\textsuperscript{61} gives an example “a man sleeping in his berth on a steamboat has his wallet lifted from his coat pocket through an open porthole. Does the steamboat have insurer’s liability for the loss without evidence that the steamboat company itself acted negligently? At common law, innkeepers have such liability. But a precedent also holds that railroads are not strictly liable for losses to passengers sleeping in railway sleeping cars. What result?”\textsuperscript{62}

When parallel law, or analyzing from analogy,\textsuperscript{63} is not the basis of the ruling, however, this kind of legal reasoning that invokes an entirely different justification for a change in law (i.e., not simply adopting law from another area based on parallel situations) might be called analyzing for justice, making law achieve its social goals or constitutional requirements. The

\textsuperscript{60} Callister, \textit{supra} n.22.
\textsuperscript{61} \textit{Legal Reason: The Use of Analogy in Legal Argument} (2005).
\textsuperscript{62} [from review of the book, by Lief H. Carter, Department of Political Science, The Colorado College, \url{http://www.bsos.umd.edu/givpt/lpbr/subpages/reviews/weinreb805.htm}].
case of *Brown v. Board of Education*[^64] is instructive because it is famous for Justice Thurgood Marshall’s making seemingly nonlegal arguments from psychology, anthropology, and sociology, so that Harvard Law School Dean Erwin N. Griswold justified the ruling not on its legal merit but for "carrying out the spirit which lies behind" the equal protection clause. And, as Justice Souter has explained the reasoning of the Court:

> As I’ve said elsewhere, the members of the Court in *Plessy* remembered the day when human slavery was the law in much of the land. To that generation, the formal equality of an identical railroad car meant progress. But the generation in power in 1954 looked at enforced separation without the revolting background of slavery to make it look unexceptional by contrast. As a consequence, the judges of 1954 found a meaning in segregating the races by law that the majority of their predecessors in 1896 did not see. That meaning is not captured by descriptions of physically identical schools or physically identical railroad cars. The meaning of facts arises elsewhere, and its judicial perception turns on the experience of the judges, and on their ability to think from a point of view different from their own. Meaning comes from the capacity to see what is not in some simple, objective sense there on the printed page. And when the judges in 1954 read the record of enforced segregation it carried only one possible meaning: It expressed a judgment of inherent inferiority on the part of the minority race. The judges who understood the meaning that was apparent in 1954 would have violated their oaths.

[^64]: 347 U.S. 483 (1954).
to uphold the Constitution if they had not held the segregation mandate unconstitutional. 65

Neither legal reasoning from analogies nor legal reasoning for justice is mentioned at all in Callister’s Adapted Taxonomy. It does, however, appear to be possible to include these concepts possibly as “paradigms (schemata)” under the second category of learning, Understanding. 66 Alternatively, this kind of research could also be categorized as “problem typing,” 67 an Application schemata, i.e., the problem of proposing that a court make new law by reasoning from analogy or for social justice. While this kind of reasoning may not be necessary in solving everyday legal problems, it certainly comes up in practice settings where achieving social justice is a goal. Consider that a high proportion of children in delinquency and criminal proceedings have untreated disabilities that in various and serious ways have contributed to the behavior that put them into the court system in the first place and hinders their representation in court. When only the juvenile and criminal law is applied to their situation, without consideration of their disabilities, these children end up prosecuted and incarcerated at much higher rates than other children. Creative lawyering for social justice, however, would bring to the attention of schools and courts that these children have rights under the Americans with Disabilities Act  68 that would equalize their treatment in the courts and criminal systems 69 and that receiving treatment and assistance in their education, as required by the Individuals with Disabilities

65 Text of Justice Souter’s Speech, Harvard Commencement, May 27, 2010, available at http://news.harvard.edu/gazette/story/2010/05/text-of-justice-david-souters-speech/ (explaining why the separate but equal ruling of Plessy v. Ferguson, 163 U.S. 537 (1896) was unacceptable by the 1950s both in terms of social consciousness and constitutional interpretation).
66 See Callister, supra n. at 202.
67 Id. at 203.
Education Act\textsuperscript{70} would prevent their being directed into the criminal justice system at all.\textsuperscript{71} This kind of lawyering requires the higher order of thinking expressed in Callister’s taxonomy of legal research, and it is a lawyering skill that is or can be taught in law school clinics. The next part examines how to teach legal research as a lawyering skill by including librarians in the law school clinic teaching, a practice called embedding librarians at the point of need, often where legal research instruction is given spontaneously as the need arises.


\textsuperscript{71} \textit{Id.}
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Figure 1

<sup>72</sup> Describing Remember as Recognizing and Recalling. Anderson & Krathwohl, supra n.50 at __.
<sup>73</sup> Describing Understand as Interpreting, Exemplifying, Classifying, Summarizing, Inferring, Comparing, Explaining. Anderson & Krathwohl, supra n.50 at __.
<sup>74</sup> Describing Apply as Executing and Implementing. Anderson & Krathwohl, supra n._ at __.
<sup>75</sup> Describing Analyze as Differentiating, Organizing, and Attributing. Anderson & Krathwohl, supra n.50 at __.
<sup>76</sup> Describing Evaluate as Checking and Critiquing. Anderson & Krathwohl, supra n.50 at __.
<sup>77</sup> Describing Create as Generating, Planning, and Producing. Anderson & Krathwohl, supra n50 at __.
Fig. 2

Callister’s Adapted Bloom’s Taxonomy

Remembering

- Recognizing
- Recalling
  - Problems
  - Paradigms
  - Terms

Understanding

- Articulate
  - Terminology
  - Controlled Vocabulary
  - Issues
  - Taxonomies

Application

- Exercise
  - Paradigms
  - Research Interviews
  - Problem Types
  - Resource Maps
  - Research Processes

Analysis and Synthesis

- Simulate
  - Legal Practice

Concluding

- Resolve
  - Results
  - Reports
  - Memoranda
  - Briefs

Metacognition

- Results
- Paradigms
- Processes
Figure 3

**Anderson & Krathwohl’s Revised Taxonomy, Types of Knowledge**

**Factual Knowledge**
- Knowledge of terminology
- Knowledge of specific details and elements

**Conceptual Knowledge**
- Knowledge of classifications and categories
- Knowledge of principles and generalizations
- Knowledge of theories, models, and structures

**Procedural Knowledge**
- Knowledge of subject-specific skills and algorithms
- Knowledge of subject-specific techniques and methods
- Knowledge of criteria for determining when to use appropriate procedures

**Metacognitive Knowledge**
- Strategic knowledge
Part IV Embedding Librarians in Law School Clinics

The present state of evolution of legal research, and information gathering in general, and particularly with the advent of online research, has resulted in a mix and match approach to methods for teaching legal research in an attempt to meet the need of producing effective researchers upon graduation. This challenge is common throughout academia. Some research libraries, finding that fewer researchers use their libraries, have taken to sending librarians to the research sites and embedding them there, often in scientific research laboratories and centers. Embedding librarians in the law school setting is a concept currently being explored by academic law librarians, and it has been tried in some law firms’ practice groups. A review of the literature has not revealed any project of embedding a librarian in law school clinics as yet. But whatever the methodology, there is a strong argument to be made in the use of law librarians as legal research teachers in a clinical program.

A. Librarians as Lawyering Skill Educators in Clinics

The Boulder Statement states as foremost that “[l]egal research education teaches the resolution of legal problems through an iterative and analytical process.” The clinic setting for teaching legal research skills is ideal for this kind of process. It offers real problems to be resolved for real clients. When the librarian acts as the primary legal research educator in the clinic, he or she is meeting with students and helping them with the analytical process, providing

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79 The concept of embedding librarians is similar to the practice of attaching journalists to military combat units in the Iraq war. See, e.g., Bonnie Azab Powell, Reporters, commentators visit Berkeley to conduct in-depth postmortem of Iraq war coverage, UCBerkeley News, Mar. 15, 2004.
80 American Lawyer’s annual survey of law firm librarians asked “are any librarians embedded in practice area groups?” The response showed that 9% surveyed said “yes.” For free online access, go to http://bit.ly/dwNhzo.
81 See supra n.5.
instruction as needed, what the Carnegie Report labels as scaffolding,\textsuperscript{82} giving feedback, and assisting students “to continually re-evaluate their progress and results to arrive at the optimal answer”\textsuperscript{83} to the legal problems they are assigned. Because of the one-on-one assistance that the librarian can offer students and the clinic faculty, the clinic setting appears to offer an ideal setting for the kind of legal research education recommended by the Carnegie Report and the Boulder Statement. In addition, the librarian is the model for the student of the professional and ethical legal researcher. The next section examines the qualifications of law school librarians for this important role in educating future lawyers.

\textbf{B. Law librarians’ qualifications for teaching in law clinics.}

By their very nature, law librarians are expert users of legal materials. Law librarians in the public services area come by their positions with a mixture of education and experience. A vast percentage of law librarians are dual degreed professionals, i.e., holders of Juris Doctor (J.D.) and Masters of Library an Information Science (M.L.I.S.) degrees. Some of these law librarians, in addition to the dual degrees, have come to the profession with experience in law practice and law firm libraries, others have advanced law degrees, and still others have both advanced law degrees and practice experience. Most of the non-dual degreed law librarians, those who have either a J.D. or a M.L.I.S., in public services today have come to those positions through extensive experience, either in law libraries or in practice. Based on these statistics, the argument can be made that law librarians can be qualified as specialized experts in legal research and that they are uniquely positioned to provide the research teaching component in a clinical environment.

\textsuperscript{82} See supra n.7

\textsuperscript{83} The Boulder Statement, supra n.5.
The question then arises, should law librarians embedded in a clinical program be selected only from those law librarians holding a J.D.? One of the big bonuses attached to a clinical experience is the fact that the students receive the benefit of working with a clinician who is an expert in the specific practice area of the clinic. The clinician not only acts as a supervisor but also as a mentor, and models effective strategies and procedures for the students. In a clinical program were the clinician is an effective model of a practitioner, the function of the law librarian is to provide the students with the model of the effective researcher. For a law librarian to be effective in this role, she must understand and be a master-researcher in the specific area of the clinic. This mastery level can be achieved through actual experience in legal research without the need of a J.D. What is needed is a librarian that understands the needs of the practitioners and how to best utilize the legal resources at hand to support those needs. As a prime example to support this hypothesis, we need look no further than the interaction between attorneys and law librarians in law firms. Clinics are, in effect, mini law firms where groups of students develop the roles of effective practitioners under the direction of a supervising attorney, the clinician. In the firms, most law librarians do not have J.D.s, yet they work closely with the attorneys to support their needs and to effectively train new associates into the intricacies of whatever area of law the specific firm practices. These law librarians are effective in their roles not because of the degrees they hold but because they have mastered the specific requirements of an area of practice.
C. Preliminary Matters

To make a system of embedding law librarians in clinic work effectively, the factors that affect the daily operation of the law library must be taken into account. The issues of work and responsibility allocation, sharing the reference load, and assignments to specific clinic must be addressed and considered before launching a successful program. As a guide to the implementation of an embedded law librarian program we will examine how the program at the University of the District of Columbia David A. Clarke School of Law (UDC-DCSL) system was conceptualized and begun. In planning the program we drew on the experiences of embedded librarians in other settings.84

With nine active clinics at UDC-DCSL and the law library’s very small public services department, our program has had to be launched in increments. Our first step was to consider the expertise of the law librarians assigned to the program so that we could best tailor those strengths with the needs of the clinics. Planning sessions were conducted by the Clinical Director and the Library administration to determine the best clinic to use for the pilot program and the librarian best suited to support that clinic. The next step was to ensure that the assigned librarian became a permanent and active member of the clinical faculty team and that she was included in planning meetings and presentations to the students. Finally we involved the other librarians in the process as a learning tool and as a preparation for their turn in the clinic. This system allowed for the implementation of the program with our most experienced librarian and for the creation of a mentoring model for the other librarians who will be included as the program develops.

84 See, e.g., David Shumaker, Who Let the Librarians Out? Embedded Librarianship and the Library Manager, 48 REF. & USER SERVICES Q. 239 (Spring 2009).
We wanted to make this effort more than a simple collaboration with and assistance to the clinical instructors in the program. We desired full immersion so that we could develop new services to meet both the ongoing needs of the clinic faculty and students but address unforeseen needs as they arose. We anticipated that the librarian should be present at as many class and tutorial meetings as possible to share knowledge about information sources, about how to find information, and how to analyze it in the context of the legal problem to be solved. In other words, the embedded librarian would become a member of the clinic community, interacting as a professional with faculty and students so as not just to provide information but to provide a model for students learning research methods and skills.

Care has to be taken that the working model for the program be one of collaborative effort among the law school’s librarians, as the work load of supporting the clinic can quickly overtake a librarians’ other duties. The creation of a completely accessible knowledge base system, similar to a searchable blog, was essential for this collaboration as a tool to share work load and avoid duplication of effort. The knowledge base is also usable as an assessment tool as all librarians have the ability to work together on any clinic project and fill the gaps where necessary. The work product included in the knowledge base creates a database of prior experience as well as a mentoring and teaching tool for the staff.

D. The UDC-DCSL Example of Librarians Embedded in a Law School Clinic

In August 2010, we began an experimental program to embed a librarian in one of the University of the District of Columbia’s David A. Clarke School of Law clinics, specifically the Juvenile & Special Education Law Clinic. In beginning this program we were concerned with setting up guidelines and goals for the program. Our plan followed the suggestions of David
for setting up an embedded librarian program. He advises starting off with an assessment of readiness with regard to staff members and the institutional organization, followed by implementation of a pilot program. This pilot plan would then be reviewed as to how it worked, allowing for revision and expansion as necessary. Initially, however, he advises, is to establish agreements with the institution relating to space, “inclusion in group communications and collaboration” and meetings, obtaining senior management sponsorship, and getting feedback for the project.  

Our first step in this process was to assess how we might implement the project given the constraints of staff, time, and budget. We determined that one of the co-authors, Helen Frazer, could carve out enough time to become embedded in one clinic, including learning the law that the clinic uses. If the program, went well, we would be able to add a second librarian to another clinic in the following semester. Because we had just added another librarian position to our staff, which would lighten the reference duties for all librarians, we were assured of time opening up for the first librarian and for the second embedded librarian. Next, we contacted the director of the clinic, Professor Joseph C. Tulman, to come to an agreement as to what would be expected of the embedded librarian and the clinic. We established that co-author Helen Frazer would be listed in the syllabus of the course and the syllabus itself would include the requirement that all clinic students meet with her regarding their individual research projects and be required to turn

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85 48 Reference & User Services Quarterly 239 (Spring 2009)
86 Id. at
in a research log. In addition, she would prepare materials for the clinic related to legal research methods and techniques.  

What has been learned from this experiment so far is that while individual research consultations with clinic students are effective for addressing each student’s needs in terms of legal research skills, all the students needed foundational training in advanced legal research skills. The interviews revealed that while most students know how to perform some kinds of research such as finding statutes and caselaw, showing that they have achieved the skill the MacCrate Report labeled as “[k]nowledge of the nature of legal rules and institutions,” the concept of an overall research process still seems ambiguous and amorphous to them. In other words, what they learned from the first year legal research education remains a series of separate research steps and they need assistance in constructing a research plan to achieve the skill the MacCrate Report calls “[u]nderstanding of the process of devising and implementing a coherent and effective research design.” Similarly, although they knew about keeping a research log or diary, almost all the students needed help in creating them to document effectively their research, results. In sum, these students appear to have attained the formalist stage of legal research of reasoning from precedent. This is insufficient for the challenge of this particular clinic, however.

In other words, they needed to learn to apply higher order thinking at the state that Callister

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88 See supra n.24.
90 See supra n.24.
defines as Synthesis – moving “beyond the parts of the problem and look[ing] for relationships to other issues, resources, alternative scenarios for analysis, and possible options as solutions.”

While teaching advanced legal research in what amounts to individual tutorials is effective in the clinic setting, this experiment shows that there is still a need for some formal research instruction before the individual consultations begin, primarily to bring all the students up to speed regarding the legal reasoning and research process, and instruction in the different applications for legal reasoning from precedent, from analogy, and for social justice. Thus within a few weeks of the beginning of the clinic, the clinic director and the librarian decided to offer a workshop on these topics. In future years, this workshop would be more effective if offered at the beginning of the semester when instruction in the law practiced in the clinic is taught. Thereafter, individual research tutorials will continue to meet students at their point of need for advanced legal research instruction. And much of this instruction will additionally include the special legal research resources and skills pertinent to the subject matter of the clinic.

One advantage of teaching legal research in the clinic setting is that there is no need for complicated planning of simulated legal research issues to facilitate learning the specialized subject matter and legal research resources of the clinic. The clinic’s legal research issues are all real and a given. Each student’s separate research project assignment has intrinsic learning motivation simply because the problems and clients are real, and the research products will be used to solve actual problems and, ideally, provide relief and justice for clients of the clinic.

IV. Conclusion

This paper has addressed the problem of law school graduates’ inadequate training in the lawyering skill of legal research by examining the literature on the pedagogy of legal research

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91 Callister, supra n.22, at 208.
instruction and the methods used to teach legal research generally. It has examined the recommendations for improving legal research instruction set forth in the 2009 Boulder Statement on Legal Research Education and also those of the 2007 Carnegie Report on legal education. Finally, it discusses the experiment begun in the fall of 2010 at the University of the District of Columbia David A. Clarke School of Law of embedding law librarians in the school’s clinics. It concludes that the embedded librarian project successfully provides an avenue for achieving the recommendations of the Boulder Statement and the Carnegie Report.