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COMBATING PROFESSIONAL ERROR IN BANKRUPTCY ANALYSIS THROUGH THE DESIGN AND USE OF DECISION TREES IN CLINICAL PEDAGOGY

TIMOTHY R. TARVIN†

INTRODUCTION
The evolution of legal education has been punctuated by dynamic change, but its focus has always been teaching analytical reasoning. “Thinking like a lawyer” is the gold standard and goal of legal education, regardless of the methodology. In the modern era, this goal has been denounced as too modest.¹ As increasing numbers of beginning practitioners have discovered that they lack the practical skills they need, there has been an outcry from the bar for educational reform that has manifested itself in studies, commentaries and revised curriculi.² The studies and commentaries call for supplemental

¹ Associate Professor of Law, University of Arkansas, School of Law. This article was the subject of a presentation at Texas Tech University School of Law in 2015, and the prototype that accompanies the article was the subject of a presentation at the American Association of Law Schools Clinical Conference in 2008. The author wishes to recognize the assistance provided by Professor Brian Gallini, Professor Randy Thompson, Dr. Eva Owens, Dr. Elaine Terrell, Kelly Reed Brown, Traci Huesing, Anna Webb Hanson, Ashley Louks, Steven Jarvis, Nathan Smith and Leland “Mac” Ferguson, as well as the many other students, faculty and staff who have given so generously of their time and energy towards the completion of the article and the prototype. This article is dedicated to my grandchildren, Will, Lucy, and Frances Virginia.
training in analytical reasoning and opportunities for experiential education, including the use of new technology in the practice of law. The call for curricular changes expresses a professional need for new graduates to be practice ready and proficient. This Article explores the changing needs of the profession, the crisis in malpractice claims, the new demands being placed on legal academia, and the challenges faced by legal educators. The author’s thesis is that the design and use of a decision tree for bankruptcy analysis can reduce or prevent professional error when used properly in clinical pedagogy.

A half century ago, the notion that decision tree software would guide a user through a series of questions and illuminate the critical issues in the legal analysis of a client’s problem would have been considered science fiction. Now it is a reality, and the potential to harness this technology as an educational tool is ripe. This Article proposes the design and use of a decision tree algorithm that presents a data driven sequence of questions to guide the user towards an optimal recommendation regarding whether to file Chapter 7 consumer bankruptcy.

Prior to the advent of decision trees and other forms of branching logic, the essential questions related to legal analysis could be reduced to checklists or other written documents.

3 A decision tree is a specific case of a rule-based system. All decision trees are rule-based systems because the rules are organized hierarchically. A decision tree can be distinguished from a knowledge-based system (also called expert systems) in that knowledge-based systems represent a specific form of rule-based system within the realm of artificial intelligence (“AI”). Knowledge-based systems use computers to display the branching logic found in the decision tree and consist of an autonomously, computer generated graph of decision rules. A knowledge-based system contains a database of rules and an inference engine. The database of rules is usually partly human generated, and partly autonomously generated. The inference engine either autonomously generates new rules, or it analyzes questions posed by the user to infer which of the rules in the database are relevant. This may be done by mining relevant databases. Knowledge-based systems are beyond the scope of this article.

4 The scope of this Article is limited solely to the use of a decision tree in the supervision of clinical students who are representing clients in assessing whether the filing of a Chapter 7 consumer bankruptcy is both permissible and advisable.
Lawyers, judges, and professors memorized questions that were key to analyzing the most common legal problems through sheer repetition. In the digital age, attorneys can learn the same information with the added safeguard of a decision tree application that replicates the sequence of questions required in legal analysis.\(^5\)

The decision tree works well in the clinical setting\(^6\) because it is propositional. In other words, the decision tree is designed to introduce a logical series of propositions in the form of syllogisms. This format, represented as “if this, then that,” drives the process forward. The construction of the decision tree is designed to allow the sequence of questions to vary according to the responses chosen. The decision tree is conversational because its format engages users in an interactive exchange that directs the user towards a conclusion based on the responses supplied.

The uses and benefits of this decision tree technology in the clinical setting include: (1) protecting clients and students from professional error, (2) teaching students critical issues in legal analysis, (3) assisting clinical faculty in supervision, (4) improving risk management, (5) promoting access to justice, (6) fostering judicial economy, and (7) rehabilitating and reclaiming the image of lawyers as honored professionals. The prototype includes the questions to be posed, the universe of responses, and links to the relevant legal authority. The user’s ability to analyze a given issue is either confirmed or corrected by the decision tree.

\(^5\) For example, WordPress is a free and open source web editor for building websites. Construction of this website utilized WordPress that allows novice HTML editors to view changes in the site in real time, and utilizes features to facilitate editing text and creating hypertext linking to other cells in the program, as well as to outside source material.

\(^6\) Law Clinic is a credit-bearing course under ABA Standard 304(b) that provides substantial lawyering experience that involves advising or representing one or more actual clients (individuals or organizations) or serving as a third-party neutral and includes: (1) direct supervision of the student’s performance by a clinical faculty member (faculty, adjunct, fellow, staff attorney, etc.); (2) opportunities for performance, feedback from the faculty member, and self-evaluation; and (3) a classroom instructional component. See A.B.A., ABA STANDARDS AND RULES OF PROCEDURE FOR APPROVAL OF LAW SCHOOLS Standard 304(b) (2017-2018).
The decision tree is accessible from any location because it is available online. It can also be downloaded and used in a situation where internet access is unavailable. The system does not require encryption because client identifiers are unnecessary, although encryption can be added as a precautionary feature.7 The components of the system can be updated as the law changes because it is resident on a local server. The integrity of the system is protected by firewalls. Preservation of the accuracy of the analysis is ensured through the use of daily electronic search queries that retrieve any changes in the law that alter the decision tree analysis.

The automated search queries are matched to corresponding cells in the tree that contain the relevant legal citation. The queries are formulated to search all databases containing statutes, rules of procedure, administrative rules, rules of ethics, cases, and other critical information. The database management process is a ten-step procedure that can be repeated at regular intervals.8 The information from the searches reveal both when the decision tree should be changed and how it should be changed. The research team assigned to maintain and update the decision tree uses the search results to make any necessary corrections.

The choice of the bankruptcy subject area for the prototype was purposeful. Many issues in bankruptcy are numbers driven, including decisions that relate to property exemptions, income and expense information, time calculations related to venue, eligibility to file, and determining what exemptions are available. Other issues are susceptible to yes or no answers, or to a limited range of responses. This distinguishes bankruptcy analysis from many other areas of the law with issues that relate to concepts that are less clearly defined, such as foreseeability and reasonableness.

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7 See ABA Comm. on Ethics & Prof'l Responsibility, Formal Op. 477R (2017) (amending Formal Opinion 99-413); see also MODEL RULES OF PROF'L CONDUCT r. 1.6(c), cmt. 18 (AM. BAR Ass'n 2015).
8 See infra at Part IV.D.
Bankruptcy is an ideal subject area for the decision tree model because it is in the top five practice areas for malpractice claims,9 and because “failure to know and apply the law” is the top category for claims by type of alleged error.10 Finally, bankruptcy filings remain high in some states,11 and even continue to rise in one jurisdiction.12 When unemployment is high, many consumers do not have the means to pay their debt and mortgage obligations. During the Great Recession, escalating medical costs, and record foreclosures created a surge in Chapter 7 filings.13

9 STANDING COMMITTEE ON LAWYERS’ PROFESSIONAL LIABILITY, A.B.A., PROFILE OF LEGAL MALPRACTICE CLAIMS 2012–2015 pt. V.A., tbl:1: Number of Claims by Area of Law (September 2016) [hereinafter PROFILE OF LEGAL MALPRACTICE CLAIMS]. The Standing Committee on Lawyer’s Professional Liability issues its report every four years. The survey is not a comprehensive review of all claims against lawyers during a given period, but instead relies on self-reporting from legal malpractice insurers. The pool of insurers reporting for the period of 2012 to 2015 differs from those that reported in previous periods. Thus, comparisons between periods may not be a reliable indication of trends. The purpose of the study is to gather information that may be helpful in claims-prevention programs.

10 See id. pt. V.E., tbl: 5: Number of Claims by Type of Alleged Error. Substantive errors are the largest area of error going back to 1985 and represent more than half of all alleged errors exceeding administrative errors, client relations errors, and intentional wrongs combined.

11 From 1900 to 1950, bankruptcy filings were relatively low. Since 1960, bankruptcy rates consistently increased in the United States, escalating dramatically over the past twenty-five years until an all-time high was reached in 2005 when one of every fifty-five U.S. households went bankrupt. The highest bankruptcy filing rates per 100,000 people annually are in Tennessee (610) and Georgia (524). Most U.S. states have filing rates ranging between 300 and 400 bankruptcy filing cases per 100,000 people per year. See Jessica Dillinger, Personal Bankruptcy Filings by State, WORLDATLAS, http://www.worldatlas.com/articles/highest-personal-bankruptcy-rates-in-the-us-by-state.html (last modified Apr. 25, 2017).


This Article will address the positive impact of using the decision tree model in four parts. Part I will provide a historical overview of the evolution of legal education and the profession’s call for more experiential education, both generally and specifically, through clinical training and the use of technology. This Section will provide context and argue that the use of decision trees in the clinical setting is the natural culmination of the legal academy’s goals of teaching analytical skills, preparing graduates for practice, and incorporating new technology into the practice of law.

Part II will describe the legal malpractice problem in the United States and furnish the statistical data that serves as a call to arms against the epidemic of preventable malpractice. This Section focuses on the major categories of malpractice claims by area of practice, firm size, disposition of claims, types of alleged error, defense expenses paid, indemnity dollars paid to claimant, and time interval from date of error to closing of claim file. The Section shows how the decision tree technology can reduce professional error and, consequently, exposure to professional liability.

Part III will examine the other uses and benefits of the decision tree in clinical pedagogy and show how the use of a decision tree can indoctrinate students in the law, assist in the supervision of students, improve risk management, promote access to justice, foster judicial economy, and help reclaim the image of lawyers as respected professionals.

Part IV will highlight the steps in the design and construction of a specialized decision tree, illustrating the functionality of the system. It will provide an example of the hands-on approach of the decision tree that allows users to visualize the questions, potential responses, and citations of authority in a logical sequence.

The prototype decision tree has branching modules that relate to four pre-filing considerations: filing eligibility; dischargeability of debt, including global objections to discharge and exceptions to discharge; exemption eligibility, including determination of applicable jurisdiction, categorical eligibility, and limitations on dollar amount; and self-incrimination. Appendix A provides a visual depiction of how the online system looks and functions. Appendix B illustrates the data
management process of updating the tree. Each module remains a work-in-process because of the need for constant monitoring and updating.

I. THE EVOLUTION OF LEGAL EDUCATION AND THE CALL FOR EXPERIENTIAL EDUCATION—A BRIEF HISTORICAL PERSPECTIVE

A. Teaching Legal Analysis—From Medieval Times to the Modern Era

The idea of teaching law as a science appears to have begun in northern Italy in the tenth and eleventh centuries when scholars and judges in Bologna and Pavia used the Code of Justinian to organize the laws of the province and the laws of the canon in the church. Students were required to memorize and apply the law, while their teachers annotated the texts. The method spread throughout Europe and to England after the invasion of William the Conqueror in 1066. Our American law school teaching method of combining lecture and law books arises from this tradition.

1. The Litchfield Model: Lectures and Treatises

The origins of the American law teaching tradition began with the creation of the first American school of law. This school, as distinct from a general bachelor’s degree course, was in Judge Tapping Reeve’s law office in the village of Litchfield, Connecticut. Reeve’s first student was his brother-in-law, Aaron Burr, who began his studies in 1775. Judge Reeve organized his instructional material into lecture notes, which he had generally standardized by 1782. The Litchfield lectures laid the

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15 See Sheppard, supra note 14, at 7.

16 Aaron Burr was the third Vice President of the United States, known for killing Alexander Hamilton, the nation’s first Secretary of the Treasury, in a duel spawned by their political rivalry.

17 JOHN R. VILE, 1 GREAT AMERICAN LAWYERS: AN ENCYCLOPEDIA 587 (2002).
foundation for instruction in what would become the professional law school. The lectures usually began with an overview of the scope of the subject and its place in the law.\footnote{Sheppard, supra note 14, at 13.} The coursework spanned fourteen months, ultimately graduating over a thousand students, including three United States Supreme Court Justices.\footnote{Id. at 17.} When Harvard Law School opened in 1815, its program followed the Litchfield model and included a mix of student recitations from Blackstone and treatises on specific legal topics, faculty delivery of written lectures, moot courts, and debate clubs.\footnote{Id. at 20.} The lecture format varied from requiring recitations to the occasional spontaneous questioning of students.\footnote{Id. at 21.} Theodore Dwight, Warden of the Columbia Law School, typified the scientific lecturer, and incorporated the Socratic method in his classroom.\footnote{See JULIUS GOEBEL, JR., A HISTORY OF THE SCHOOL OF LAW: COLUMBIA UNIVERSITY 127 (Colum. Univ. Press 1955); see also Sheppard, supra note 14, at 21.}

California Chief Justice Seranus Hastings’s College of Law in San Francisco adopted a system much like Dwight’s at Columbia, but refined the lectures to conform to John Norton Pomeroy’s system.\footnote{See Sheppard, supra note 14, at 22.} The Pomeroy system consisted of detailed syllabi, comprehensive treatises (each with an emphasis on statutes), and recent case opinions on each subject area coupled with a discussion-based class lecture.\footnote{See id. at 23.}

2. The Langdell Model: Lecture and Casebook

Other schools, including the University of Virginia School of Law, followed the textbook and lecture method based on the notion that a simple statement of the rule of law coupled with a practical illustration worked best.\footnote{See id. at 24.} Virginia waited to adopt the casebook method until the 1930s.\footnote{See id. at 25.} Yale Law School also avoided the case method and used an approach that taught with treatise readings and oral quizzes until 1903.\footnote{See id. at 26.} The monologue lecture

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\footnote{Sheppard, supra note 14, at 13.} \footnote{Id. at 17.} \footnote{Id. at 20.} \footnote{See JULIUS GOEBEL, JR., A HISTORY OF THE SCHOOL OF LAW: COLUMBIA UNIVERSITY 127 (Colum. Univ. Press 1955); see also Sheppard, supra note 14, at 21.} \footnote{See Sheppard, supra note 14, at 22.} \footnote{See id. at 23.} \footnote{See id. at 24.} \footnote{See id. at 25.} \footnote{See id. at 26.} \footnote{See id. at 58 n.231.}
method continued to be used into the twentieth century, as casebooks replaced treatises as the assigned reading by the end of the twentieth century.28

Professor and later Dean Christopher Columbus Langdell29 saw the law as a science and felt that it should be studied as a science.30 Civilizations since ancient times considered the law as science,31 however, Langdell popularized the concept in American legal education.32 He rejected the traditional lecture format and instituted his case method33 of legal instruction requiring students to study appellate cases to mine the core principles and testing students’ knowledge using the Socratic method.34 Though

28 See id. at 23–24.
29 Langdell studied at Harvard from 1851 to 1853 assisting Parsons with his Law of Contracts and working the library. After his graduation, he practiced law for sixteen years in New York with his firm, Stanley, Langdell and Brown. He lived alone and unmarried in an apartment above the firm’s office.
30 C.C. LANGDELL, A SELECTION OF CASES ON THE LAW OF CONTRACTS vi (Lawbook Exchange 1999) (1871) (“Law, considered as a science, consists of certain principles or doctrines. To have such a mastery of these as to be able to apply them with constant facility and certainty to the ever-tangled skein of human affairs, is what constitutes a true lawyer; and hence to acquire that mastery should be the business of every earnest student of law.”).
33 Id. at 545–46 (explaining the distinction between “case system” and “case method,” and pointing out that John Bayles’ plea in 1820 for case study, and Judge Zephaniah Swift’s 1810 treatise on evidence with an appendix of cases, as well as the first American casebook by Angell, preceded Langdell’s popularization of case study as a teaching method). See ALFRED ZANTZINGER REED, TRAINING FOR THE PUBLIC PROFESSION OF THE LAW: HISTORICAL DEVELOPMENT AND PRINCIPAL CONTEMPORARY PROBLEMS OF LEGAL EDUCATION IN THE UNITED STATES WITH SOME ACCOUNT OF CONDITIONS IN ENGLAND AND CANADA 372–73 (1921) (quoting John Barnard Byles, A Discourse on the Present State of the Law of England, The Proposed Schemes of Reform, and the Proper Method of Study. Delivered in Lyon’s Inn Hall. Being the First of a Series of Lectures on Commercial Law (London, 1829)); see also Simeon E. Baldwin, Education for the Bar in the United States, 4 A M. L. SCH. REV. 8, 13 (1915). According to Professor Charles Warren, Angell’s Cases on Watercourses, published in 1824, was the first American casebook. CHARLES WARREN, A HISTORY OF THE AMERICAN BAR 541 (1911).
34 See MATT COPELAND, SOCRATIC CIRCLES: FOSTERING CRITICAL AND CREATIVE THINKING IN MIDDLE AND HIGH SCHOOL 7 (2005).

“Socratic questioning is a systematic process for examining the ideas, questions, and answers that form the basis of human belief. It involves recognizing that all new understanding is linked to prior understanding, that thought itself is a continuous thread woven through our lives rather than isolated sets of questions and answers.”
the case method of law study was overwhelmingly rejected at first, it became universally accepted as the primary teaching method in American law schools in the twentieth century and beyond.35

In 1952, Edmund Morgan suggested there were three benefits of teaching from the casebook. First, as a way of imparting a knowledge of legal doctrine. Second, as a way of teaching an understanding of the facts and rationale of each case. Third, as a basis for hypothetical extrapolation, a way to lead students to test the soundness of reasoning and to apply it to new situations.36 Yet, even while the case method enjoyed wide acceptance,37 its critics, including scholars and practitioners alike, argued that the case method was often not properly employed,38 and did not adequately prepare graduates for practice.39 Examples of the improper use of the method included providing answers instead of requiring the students to think for themselves and advance selection of students to recite.40

Id. at 7–8.


37 The 1995 survey suggests that the case method is the most popular method among American law schools, with 86% using a casebook as the primary text. See Sheppard, supra note 14, at 37.

38 In 1944 the Association of American Law Schools (“AALS”) Curriculum Committee report on legal education found that the case method was “failing to do the job of producing reliable professional competence on the byproduct side in half or more of our end-product, our graduates.” See Sheppard, supra note 14 at 36 (quoting the 1944 AALS Committee report on legal education).


3. The Problem Method

In the late 1900s, there was growth in the use of the problem book with some reliance on treatises.\textsuperscript{41} For centuries, law books setting forth the form of questions and answers enabled students to memorize rote answers.\textsuperscript{42} By 1940, the problem method was adopted for a seminar at Columbia. Several professors and practitioners ran two sections once a week in which students discussed a problem submitted by one of the practitioners and drafted memoranda proposing solutions.\textsuperscript{43} The problem method became a popular pedagogical experiment in the 1950s and remains so today, incorporating media, collaboration, hypotheticals, role-plays, and narratives as methods for problem solving.\textsuperscript{44}

4. The Convergence of Technology, the Internet, and Clinical Education

The use of technology to assist classroom teaching has advanced from electric typewriters, copiers, overhead projectors, and laser pointers to digitized video, computer-assisted legal research, document assembly, and online filing.\textsuperscript{45} Computer-assisted legal research started in Ohio in 1967.\textsuperscript{46} Lexis\textsuperscript{47} became operational in 1970 with a full-text searchable database of Ohio law.\textsuperscript{48} West Publishing Company\textsuperscript{49} introduced its national online service as Westlaw in 1975.\textsuperscript{50} In less than a decade, research training moved increasingly out of the stacks and into the computer lab and opened up a new world of remote electronic

\textsuperscript{41} Id. at 37.
\textsuperscript{42} Id.
\textsuperscript{43} GOEBEL, JR., supra note 22, at 338–43 (quoting Resolution of the Columbia Board of Trustees, Dec. 2, 1793, 1 Kent Papers 187); see also Sheppard, supra note 14, at 38 n.443.
\textsuperscript{44} See generally Gregory L. Ogden, The Problem Method in Legal Education, 34 J. LEGAL EDUC. 654 (1984); see also Sheppard, supra note 14, at 39 n.460.
\textsuperscript{45} See Sheppard, supra note 14, at 41–42.
\textsuperscript{46} See William G. Harrington, Computers and Legal Research, 56 A.B.A. J. 1145, 1145–46 (1970); see also Sheppard, supra note 14, at 42 n.509.
\textsuperscript{47} Now owned by Reed Elsevier.
\textsuperscript{49} Now owned by Thompson Reuters.
\textsuperscript{50} See Sheppard, supra note 14, at 42.

A quarter of a century after the adoption of the first electronic casebook, the profession and the legal academy are embracing new technologies in the practice of law and adapting to keep pace with the world around them. The emergence of new technologies and the Internet has coincided with the repeated calls over the past twenty-five years for more and better clinical training of law students.

B. The Call to Experiential Education and Technology Preparedness

1. Learning by Doing and the Cost of Educating Practice Ready Graduates

Experiential learning is learning by doing. Clinical educators place each student into the role of counsel so that the student may experience what the practice of law is like. This allows the student to sense the emotional difference between the

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52 See Sheppard, supra note 14, at 43.


54 See THE MACCRATE REPORT, supra note 2, at 6–7; see also STUCKEY ET AL., supra note 2, at 5; EDUCATING LAWYERS, supra note 2, at 8.

55 Jerome Frank attacked Langdell’s method as “isolating students from the realities” of practice and insisted that law schools be lawyer-schools, not book-law schools. Frank felt that Langdell had choked American legal education. See Mills Holmes, supra note 32, at 559–60. For a description of Frank’s thought on legal education and Langdell, see JEROME FRANK, COURTS ON TRIAL: MYTH AND REALITY IN AMERICAN JUSTICE 225–46 (1949); Jerome Frank, What Constitutes a Good Legal Education?, 19 A.B.A. J. 723, 723 (1933); Jerome Frank, A Plea for Lawyer-Schools, 56 YALE L.J. 1303, 1303 (1947); Frank, supra note 1.
fictional client in a simulated setting and the real client in the practice setting. For most students, recognition of the difference is immediate and profound.\(^{56}\) When a student reads the transcription of testimony of a client in an appellate case, the story may be compelling and the student may be moved. Even so, the student is always aware that while the story may be real, the characters, like the story itself, reside in the past. In the simulated skills setting when the fictitious client emotes, the student may admire the acting skill of the participant in the role-play, but the student’s reaction can never be as visceral as when the client is her own. In simulated skills courses, as in doctrinal courses, the drama for the student is performance driven because it is grade focused. In the clinical setting, the drama is client-centered because the representation is client centered.\(^{57}\)

The live-client clinic offers students an opportunity to represent individuals and organizations in the real world with the guidance of a trained clinical supervisor.\(^{58}\) The experience gives students a chance to move beyond hypothetical classroom examples and the representation of fictional clients in simulated skills learning.\(^{59}\) This opportunity is critical to students’ integration of knowledge of the law with the practice of law.

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\(^{58}\) David F. Chavkin, Am I My Client’s Lawyer?: Role Definition and the Clinical Supervisor, 51 SMU L. REV. 1507, 1510 (1998); see also Nina W. Tarr, Current Issues in Clinical Legal Education, 37 HOW. L.J. 31, 45 (1993) (exploring the implications of the triangular relationship of the client, student, and supervisor in clinic representation).

\(^{59}\) Report of the Committee, supra note 2, at 513.
Langdell's method of appellate case study offers many advantages that are not available in the clinical setting. First, the facts have been decided by the trial court and are not in dispute. Second, the legal issues to be decided have been identified and defined by both the trial court and the appellate court. These features allow students to compare the arguments of counsel with the reasoning of the trial court and the appellate court. Students learn to think like a lawyer in the classroom setting by observing how courts identify and resolve issues based on a particular set of facts. The casebook method is topical and builds on foundational principles in a linear fashion, moving from simpler concepts to the more complex. The process focuses on major areas of the law one at a time. It is a time-proven method for legal instruction.

In contrast, the clinical method calls on students in a practice setting to make sense of what may be a disjointed client narrative that blurs the relevant subject areas of the law. The facts are not frozen, but fluid. The client problem may be multitopical and require that the student integrate her knowledge of black letter law, procedure, ethics, and practical considerations. Clientele in the poverty clinic setting are disproportionately disabled, dysfunctional, or illiterate, and this can make client relations and client management challenging. Experiential learning opportunities abound, including cross cultural representation, communicating through an interpreter, and working collaboratively. Juxtaposed in this fashion, the Langdellian method and clinical method stand in stark contrast to each other.

Clinical education in the transactional setting helps students learn how to gather facts, conduct research, draft documents, communicate effectively, solve complex legal problems, and interview and counsel clients. In the adversarial setting students learn to negotiate on behalf of their clients and advocate for them in court and before administrative tribunals. Clinical education imparts a complete set of practice skills and instills in students a sense of the importance of pro bono work. In short,

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students learn skills and values that will serve them throughout their professional life. The clinical experience is a place where the study of theory and skills training culminate, like simulated flight training, to give way to take off and flying with a co-pilot.

The law, like aviation, is horribly unforgiving of small mistakes and is a place for the study of theory, lectures, and simulation. However, no flight instructor would send an aspiring aviator on a solo flight before the student has flown with a trained instructor and practiced the basics. Legal education must afford each student an opportunity to practice her skills with an experienced practitioner, who is dedicated to supervising and teaching in a clinical setting. The legal profession itself has acknowledged the importance of this concept. The bar demands, and the experts agree, that the profession needs practice-ready graduates, but there are challenges that prevent this vision from becoming a reality. One challenge is the cost of forgiven tuition revenue. When measured in terms of the cost per student credit hour, clinical education is one of the most expensive components of legal education. A lecture class of 100 students generates at least ten times the tuition income of a clinical course with eight to ten students. This cost creates a financial disincentive to the development and enlargement of clinical programs. Enlarging clinical enrollment by increasing

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63 TASK FORCE ON PROFESSIONAL COMPETENCE, A.B.A., FINAL REPORT AND RECOMMENDATIONS (1983) [hereinafter The Friday Report] ("[T]he strength of legal education is teaching substantive law and developing analytical skills . . . teaching students to think like lawyers . . . The problems and issues in American legal education involve chiefly the teaching of other lawyering skills.") See THE MACCRATE REPORT, supra note 2, at 236 (quoting The Friday Report); STUCKEY ET AL., supra note 2, at 113; SULLIVAN ET AL., supra note 2, at 7.

64 An eight-student limit for our clinics conforms with national standards. The student-faculty ratio, depending on the make-up of the clinic, cannot generally exceed one supervisor to eight to ten students. See Sandra A. Hansberger, The Road to Tomorrow, OR. ST. B. BULL., May 1997, at 11. AALS-ABA Guidelines for Clinical Legal Education Committee recognized the desirability of a ratio of 1 to 8 or 1 to 10 as long ago as 1980. Report of the Committee, supra note 2, at 510. A subsequent AALS Report noted, that the student-faculty ratio of 1 to 10 assumes faculty devotes all of its time to supervising students receiving four hours of credit per semester. Id. at 567 n.2.

student-faculty ratios is difficult because the demands of experiential teaching are different from non-experiential teaching, and because law schools must ensure that student-faculty ratios, caseloads, and the overall obligations of clinicians are consistent with achieving educational and programmatic goals.66

Another challenge is the pressure on law schools to focus more resources on bar passage rates. The proposed revision of ABA Standard 316 requires that seventy-five percent of a law school’s graduates in a calendar year who sit for a bar exam, must pass a bar examination administered within two years,67 instead of the current five-year rule.68 This proposed change in the standard purports to emphasize graduates’ fundamental knowledge of legal theory, though the efficacy of the bar exam on

66 STUCKEY ET AL., supra note 2, at 79.
67 The proposed revision to ABA Standard 316 (February 2017) by the Council of the Section of Legal Education and Admissions to the Bar was presented to the ABA House of Delegates at the Midyear Meeting in February and failed to pass. Revised Standards for Approval of Law Schools, ABA SECTION OF LEGAL EDUCATION AND ADMISSION TO THE BAR (Feb. 2017), https://www.americanbar.org/content/dam/aba/images/abanews/2017%20Midyear%20Meeting%20Resolutions/110b.pdf (last visited Nov. 11, 2017). Under ABA rules, the house can send the proposed rule, Resolution 110B, back to the Council twice for review, but the council has the final decision on matters related to accreditation. See Stephanie Francis Ward, ABA House Rejects Proposal To Tighten Bar-Pass Standards for Law Schools, ABA JOURNAL (Feb. 6, 2017), http://www.abajournal.com/news/article/aba_house_rejects_proposal_to_tighten_bar_pass_standards_for_law_schools/.
68 No accredited law school has ever failed to comply with the existing Standard 316, and there are three ways to meet its current requirements. Revised Standards for Approval of Law Schools Managing Director’s Guidance Memo, ABA SECTION OF LEGAL EDUCATION AND ADMISSION TO THE BAR (Aug. 2016), https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/governancedocuments/2016_august_guidance_memo_S316.authcheckdam.pdf (last visited Nov. 11, 2017). One is that at least 75% of graduates from the five most recent calendar years have passed a bar exam. Second is that there’s a 75% pass rate for at least three of those five years; and third a school can be in compliance if 70% of its graduates pass the bar at a rate within 15 percentage points of the average first-time bar pass rate for ABA-approved law school graduates in the same jurisdiction for three out the five most recently completed calendar years. See Ward, supra note 68.
this point has been drawn into question.\textsuperscript{69} Taken together, the bar examination and law schools’ focus on bar passage rates to maintain accreditation prioritize students’ test taking ability above practice competencies.\textsuperscript{70} Stressing bar passage in accreditation diverts law school resources away from clinical programs because the standard forces law schools to teach to the bar exam.\textsuperscript{71} The use of decision tree technology in the clinical setting assists clinical faculty in supervision, thus increasing enrollment capacity and reducing the per student cost of clinical education. The potential to make clinical education competitive as a revenue stream and benefit a larger percentage of students by embracing new technologies is only beginning to be realized.\textsuperscript{72}

2. The MacCrate Report Findings

In 1990, an ABA Task Force undertook a comprehensive survey of ABA-approved law schools to review curriculum development in the skills training area and the availability of skills programs to students.\textsuperscript{73} The findings were published in 1992 and are commonly referred to as the MacCrate Report. In the Report, “[t]he ABA Task Force on Solo and Small Firm Practitioners adopted the statement of one of its witnesses: ‘The biggest problem that solos and smalls have is isolation.’ ”\textsuperscript{74} Thus, for beginning lawyers, the smaller the practice setting, the more they rely on their legal education for learning practice competencies.\textsuperscript{75} In short, the Task Force found that “[t]he


\textsuperscript{70} Goforth, supra note 69, at 51, 73–74, 87–88.

\textsuperscript{71} Id. at 52, 63–64, 73.

\textsuperscript{72} Mills Holmes, supra note 32, at 576.

\textsuperscript{73} THE MACCRATE REPORT, supra note 2, at xii.

\textsuperscript{74} Id. at 46–47.

\textsuperscript{75} FRANCES KAHN ZEMENS & VICTOR G. ROSENBLUM, MAKING OF A PUBLIC PROFESSION 152–64 (1981); Special Committee for a Study of Legal Education, A.B.A., LAW SCHOOLS AND PROFESSIONAL EDUCATION 84 (1980) [hereinafter Foulis Committee]; John O. Mudd & John W. LaTrielle, Professional Competence: A Study
transition from law school into individual practice or relatively unsupervised positions in small offices . . . presents special problems which law schools and the organized bar must address," namely lack of mentors and supervision for new attorneys.\textsuperscript{76} A 2005 study shows that 75\% of lawyers are in private practice, and 69\% of lawyers in private practice are in firms of ten or less.\textsuperscript{77} Almost half were solo practitioners.\textsuperscript{78} A principal function of most solo and small-firm practitioners is handling disputes for individual clients in a variety of circumstances. Lawyers’ time in handling disputes for individual clients was divided as follows\textsuperscript{79}:

<table>
<thead>
<tr>
<th>Time Allocation of Skills Used in Representation</th>
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<tbody>
<tr>
<td>Conferring with Client</td>
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<tr>
<td>Factual Investigation</td>
</tr>
<tr>
<td>Legal Research</td>
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<tr>
<td>Pleadings</td>
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<tr>
<td>Discovery</td>
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<tr>
<td>Settlement Discussions</td>
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<tr>
<td>Trial and Hearings</td>
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<tr>
<td>Appeals and Enforcement</td>
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<tr>
<td>Other</td>
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</tbody>
</table>

\textsuperscript{76} The MacCrate Report, supra note 2, at 47; \textit{see also} Zemens & Rosenblum, supra note 75, at 152–64; Foulis Committee, \textit{supra} note 75, at 84; Mudd & LaTrielle, \textit{supra} note 75 at 27.


\textsuperscript{78} \textit{Id.}

\textsuperscript{79} See David M. Trubek et al., \textit{The Costs of Ordinary Litigation}, 31 UCLA L. Rev. 72, 91 (1983). The U.S. Justice Department’s Civil Litigation Research Project in the early 1980s surveyed 5,000 households and over 1,000 lawyers in five states to determine the incidence of “disputes” in eight selected general areas and compared disputes to complaints filed. \textit{The MacCrate Report}, \textit{supra} note 2, at 39–40.
This allocation of lawyer time suggests what lawyering skills are important to many solo and small firm practitioners. These are the skills most lawyers in America need because these are the things most lawyers do.  


Energized by the Ford Foundation’s CLEPR Project in the sixties and seventies, the ABA held a 1984 conference, “Legal Education and the Profession: Approaching the 21st Century” that led to two influential reports on law school curriculum and the practice readiness of graduates.  

Best Practices for Legal Education (Best Practices) and the Carnegie Report (Carnegie) are two major studies that each called on law schools to: (1) broaden the range of lessons they teach, reduce doctrinal instruction that uses the Socratic dialogue and the case method; (2) integrate the teaching of knowledge, skills and values, and not treat them as separate subjects addressed in separate courses; and (3) give greater attention to instruction in professionalism.

Best Practices carefully distinguished experiential education from experiential learning by pointing out that experiential education consists of a designed, managed, and guided experience; whereas, learning is not necessarily accompanied by

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80 THE MACCRATE REPORT, supra note 2, at 40.
81 Robert MacCrate, Foreword to STUCKEY ET AL., supra note 2, at vi–vii. In 1987, the ABA Section of Legal Education and Admissions to the Bar convened a “National Conference on Professional Skills and Legal Education.” Conference co-chair and leader of the Best Practices Project, Professor Roy Stuckey stated the goal: “To develop through a dialogue a consensus understanding about the present state of professional skills instruction in American law schools.” Justice Rosalie Wahl of the Minnesota Supreme Court and Chair of the ABA Section of Legal education and Admissions to the Bar asked: “Have we really tried in law school to determine what skills, what attitudes, what character traits, what quality of mind are required of lawyers? Are we adequately educating students through the content and methodology of our present law school curriculums to perform effectively as lawyers after graduation?” The Carnegie Foundation published its own contemporaneous report, Educating Lawyers, calling the time an “historic opportunity to advance legal education,” and stating that “the focus of this book is on the preparation of lawyers, more particularly on their preparation in law school—the crucial portal to the practice of law.” See SULLIVAN ET AL., supra note 2, at 1, 12.
82 STUCKEY ET AL., supra note 2, at vi–vii.
83 SULLIVAN ET AL., supra note 2.
84 STUCKEY ET AL., supra note 2, at vii.
academic inquiry.\textsuperscript{85} Best Practices sets forth the recommended 
practices for experiential courses generally and live-client clinics 
specifically. The practices for live-client clinics include: (1) 
adarticulated educational goals; (2) the provision of law office 
management and case management systems; (3) malpractice 
insurance; (4) advance approval, review, and observation by 
faculty of all outcome-significant activities performed by 
students; (5) balancing the goal of giving students independence 
and responsibility with the goal of protecting clients’ interests; 
(6) classroom components; (7) adequate facilities and staffing; 
and (8) responsiveness to the legal services needs of the 
communities they serve.\textsuperscript{86} In short, it emphasized practices that 
are essential to clinical work, and those which no experienced 
clinician would disavow.

Carnegie’s findings were bolder and more damning in its 
criticism of legal education. The report finds that legal 
education’s quest for academic respectability resulted in the 
emphasis of legal knowledge and reasoning at the expense of 
attention to practice skills and that law school curriculum 
focusses even less on the relationship of legal activity to morality 
and public responsibility.\textsuperscript{87} Carnegie points out that whatever 
the merits of the concept of “value-free” knowledge, those merits 
do not transfer to the idea of “value-free” professionals.\textsuperscript{88} From 
this vantage point, law is more than science, and a set of 
techniques for managing social relationships. Instead, it is a 
tradition of social practice that includes habits of mind and an 
ethical engagement with the world.\textsuperscript{89} Thus, legal education 
misses the point when it omits instruction on the practice of law 
by sacrificing experiential education for other studies.\textsuperscript{90}

To develop their professional expertise, students need access 
to forms of social interaction that enhance their ability to act and 
think well in uncertain situations. The clinical setting models 
the interaction of practitioners by providing an opportunity to consult with colleagues, study, reflect, analyze, and assess

\textsuperscript{85} Id. at 165–66.
\textsuperscript{86} Id. at 189–97.
\textsuperscript{87} SULLIVAN ET AL., supra note 2, at 7.
\textsuperscript{88} Id.
\textsuperscript{89} Id. at 8.
\textsuperscript{90} Id.
matters that require the exercise of their professional judgment.91 For years, this type of teaching has been at the core of education in medicine and nursing.92 Seen in this light, teaching focused on practice is not at odds with theoretical teaching, but complements it logically and naturally.93 In short, Carnegie recommends unifying formal legal knowledge with practice experience in a single educational framework, and thus integrating student learning of theoretical and practical knowledge with professional identity.94

The use of the decision tree serves the twin pedagogical goals of teaching analytical skills and embracing existing and emerging technology in a way that assists clinical law students in their role as emerging lawyers. At the same time, the use of the decision tree responds to two express mandates issued by the profession. The first is the ABA's call for greater guidance and assistance in the provision of legal services in the absence of a mentor or supervising attorney.95 The second is the ABA's requirement that attorneys become competent in the use of technology.96

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91 Id. at 9–10.
92 Id. at 10.
93 Id.
94 Id. at 12–13.
95 See The Friday Report, supra note 63, at 34; THE MACCRATE REPORT, supra note 2, at 47.
4. The Accelerating Adoption of Technology by the Courts and Public

The administrative offices of the United States District Courts implemented the Case Management/Electronic Court Filing system (“CM/ECF”) for use in the Northern District of Ohio in 1996 to deal with asbestos litigation and the tremendous amount of paperwork associated with it. The Western District of Missouri, the District of Oregon, and the Eastern District of New York, followed by adopting the CM/ECF system in 1997. The courts quickly realized how much physical file storage space could be saved by storing files electronically.

National rollout of the remote electronic court filing (“ECF”) system started in the United States Bankruptcy courts in early 2001. As a result, bankruptcy filing fees could be paid online by credit card. In 2002 ECF was expanded to the United States District Courts, and in 2004 it was adopted in the federal appellate courts. While the CM/ECF system is not used in state courts, by 2007 most states had begun implementation of comparable systems for some cases. Forty-five states and the District of Columbia now have some form of e-filing.

In short, over the past two decades there has been a sea change in the way that courts process filing and manage cases. The transition of the courts to electronic case management and remote filing has accelerated the adoption of document assembly

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101 Id.
and filing software and revolutionized the practice of law. The emergence of the digital, paperless practice is a watershed event like no other in the history of the profession.

The Model Rules state that “[a] lawyer shall provide competent representation to a client,” and that “[c]ompetent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation.”103 This obligation is amplified by Comment 8:

To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.104

The profession mandates that practitioners have an ethical responsibility to keep up with changes in new technologies that impact the practice of law, weigh the benefits and risks, and employ technology to provide competent representation. The need to educate students in the use of technology in the practice of law has never been greater.105 Some law schools have acknowledged that the traditional curriculum is insufficient to give students the skills they need in today’s market, and are making changes to meet the challenges.106

103 MODEL RULES OF PROF’L CONDUCT, r. 1.1 (AM. BAR ASS’N 2015).
104 MODEL RULES OF PROF’L CONDUCT, r. 1.1 cmt.8 (AM. BAR ASS’N 2015) (emphasis added).
105 Barbra Elenbaas, Spotlight on Sections: Technology, Law, and Legal Education, ASS’N AM. LAW SCHS. (Fall 2016), https://www.aals.org/about/publications/newsletters/aals-news-fall-2016/section-on-technology-law-legal-education “In my view, legal education will soon experience the most profound changes since Dean Langdell in the mid- to late 1800s. . . . More important than the adoption of any one technology is the development of a mindset that looks forward to technological change, and that consciously strives to overcome practical and cultural obstacles to mastering new technologies. . . . Law schools can do this through professors modeling the mindset, particularly in clinical settings; through hiring, by making technological knowledge a factor in the selection process; and through adding technology-heavy topics to the curriculum.”

Id.
For example, clients want alternatives to the billable hour, alternative fee arrangements or “AFAs,” such as fixed fee services. Under AFAs, lawyers profit by spending less time delivering quality legal services. Achieving increased efficiency means teaching lawyers practice technology and innovative practices including project management, knowledge management, automated document assembly, expert systems, artificial intelligence, predictive coding, the use of social media in marketing and investigation, case management tools, cybersecurity, and electronic discovery.

Artificial intelligence is the intelligence exhibited by machines. For an example of an application of artificial intelligence to the practice of law, see ROSS INTELLIGENCE, http://www.rossintelligence.com (last visited Nov. 11, 2017).

Predictive Coding allows litigation support teams to sort massive amounts of material with software that enables the user to take a sample of the pool of documents, along with keywords and human input, to more quickly categorize the full set of electronic material and speed up the discovery process. See Sheldon Krantz & Michael Millemann, Legal Education in Transition: Trends and Their Implications, 94 N.E.B. L. REV. 1, 24 (2015); see also Ronald W. Staudt & Andrew P. Medeiros, Access to Justice and Technology Clinics: A 4% Solution, 88 CHI-KENT L. REV. 695, 704 (2013).


Julie Sobowale, Law Firms Must Manage Cybersecurity Risks, A.B.A. J. (Mar. 2017), http://www.abajournal.com/magazine/article/managing_cybersecurity_risk. TruShield, an IT security company, reported in 2015 that the legal industry was the second most targeted sector for a cyberattack. The 2016 report revealed that small law firms were now the most targeted. The “cybersecurity firm Mandiant estimated that 80 of the 100 biggest firms in the country, by revenue, have been hacked since 2011.” Id. “More than 11.5 million documents from the Panama-based law firm Mossack Fonseca were leaked to the public . . . [containing] 2.6 terabytes of data, . . . more than the . . . Snowden National Security Agency leaks and the 2010 WikiLeaks documents combined. Julie Sobowale, 6 Major Law Firm Hacks in Recent History, A.B.A. J. (Mar. 2017), http://www.abajournal.com/magazine/article/law_firm_hacking_history.

Perlman, supra note 106.
The decision tree offers students the opportunity to be among the vanguard of first adopters in the new millennium.\textsuperscript{112} The clinical setting offers the first and best opportunity for students to use this new technology and grasp what is expected of them as attorneys.\textsuperscript{113} Leadership thus far comes from practitioners and students who demand new technologies, not from legal educators.\textsuperscript{114} That needs to change.

In today's marketplace, it is not enough to merely think like a lawyer; graduates must think like information handlers in the digital age.\textsuperscript{115} Entities not licensed to practice law have targeted the legal market and commoditized legal services on an enormous scale. LegalZoom reported more than two million customers with over $100 million in revenue in 2011.\textsuperscript{116} The ABA eLawyering Task Force of the Law Practice Management Section estimates that in an eighteen-month period more than 50,000 no-fault divorces were processed by online services representing $100 million in lost revenue to family law attorneys.\textsuperscript{117}

In the twentieth century, there was little precedent for the association of lawyers from varied practices areas in a “virtual office,” nor was there a template for a “virtual practice.”\textsuperscript{118} These innovations have led to “branded networks” used for marketing nationally and vertically.\textsuperscript{119} Both are creatures of the new millennium that hold great promise for the practice of the future.

\begin{itemize}
\item \textsuperscript{112} See Krantz & Millemann, \textit{supra} note 108, at 28 (explaining how law schools can train students through courses to use new technology and encourage efficiency in the legal profession).
\item \textsuperscript{113} See Tanina Rostain et al., \textit{Thinking Like a Lawyer, Designing Like an Architect: Preparing Students for the 21st Century Practice}, 88 CHI.-KENT L. REV. 743, 744–45 (2013).
\item \textsuperscript{116} Luz E. Herrera, \textit{Training Lawyer-Entrepreneurs}, 89 DENV. U. L. REV. 887, 896 (2012).
\item \textsuperscript{117} Id. at 898.
\item \textsuperscript{118} See William E. Hornsby, Jr., \textit{Gaming the System: Approaching 100% Access to Legal Services Through Online Games}, 88 CHI.-KENT L. REV. 917, 931–32 (2013) (defining a “virtual office” as one that brings together lawyers from different practice areas online rather than in a physical location, while a “virtual law practice” exists online through a secure portal accessible to both the client and the attorney).
\item \textsuperscript{119} Id. at 930.
\end{itemize}
II. THE GROWING PROBLEM AND DESTRUCTIVE IMPACT OF LEGAL MALPRACTICE IN THE UNITED STATES

A. Defining Legal Malpractice

Legal malpractice can be defined in either theoretical or practical terms. The theoretical approach is more useful to legislators and scholars, and focuses on whether the wrong primarily concerns the quality of legal services as opposed to an ethical or professional breach.\(^\text{120}\) Conversely, the practical approach identifies the types of malpractice as they relate to claims that could give rise to professional liability.\(^\text{121}\) The keys to avoidance of professional liability claims are (1) the identification of the types of malpractice that are preventable and (2) the construction of tools that highlight areas of risk and assist attorneys in fulfilling their professional obligation.

The decision tree is a diagnostic tool that directs the user to critical questions in the threshold analysis of common issues and rare issues that may have potentially catastrophic consequences. Its use helps decrease the cost and frequency of legal malpractice. This is important to all lawyers because there is evidence that the “worst lawyers” are “older, more experienced, ha\[ve\] higher Martindale-Hubbell ratings, and ha\[ve\] a disproportionate number of claims in the business category.”\(^\text{122}\)

One study shows that graduates of the “top” twenty-five law schools face malpractice claims in proportion to their numbers.\(^\text{123}\)

B. The Increasing Cost and Frequency of Legal Malpractice

The true cost to the legal profession of legal malpractice can best be understood by examining the statistical data over the past twenty-five years.\(^\text{124}\) In 1992 the total costs of legal

\(^\text{120}\) Ronald E. Mallen, Recognizing and Defining Legal Malpractice, 30 S.C. L. REV. 203, 204 (1979).
\(^\text{121}\) Id. at 204, 206. For a comprehensive treatise on legal malpractice, see generally RONALD E. MALLEN, LEGAL MALPRACTICE (2017 ed.).
\(^\text{122}\) Manuel R. Ramos, Legal Malpractice: No Lawyer or Client is Safe, 47 FLA. L. REV. 1, 57 (1995).
\(^\text{123}\) Id. at 34.
\(^\text{124}\) The Standing Committee on Lawyer’s Professional Liability issues its report every four years. The survey is not a comprehensive review of all claims against lawyers during a given period, but instead relies on self-reporting from legal malpractice insurers. The pool of insurers reporting for the period of 2012 to 2015.
malpractice to insurers in the United States was placed between $3 billion and $4 billion per year. At that time the cost of malpractice was estimated to have grown by a factor of five or six times from a decade earlier and was expected to continue to grow.

The ABA publishes reports on malpractice every four years. Claims are classified by area of law, number of attorneys, type of activity, disposition of claim, type of alleged error, expense paid, indemnity dollars paid to claimant, total dollars paid in both defense and indemnity, time interval from date of error to closing of file, and time interval from opening of claim file to closing of file. The zero dollar claims category dropped dramatically, while every non-zero category rose.

differs from those that reported in previous periods. Thus, comparisons between periods may not be a reliable indication of trends. The purpose of the study is to gather information that may be helpful in claims-prevention programs. PROFILE OF LEGAL MALPRACTICE CLAIMS, supra note 9, at 2.

125 J. STANLEY EDWARDS, TORT LAW 253 (2015) (presenting a roundtable discussion led by the American Lawyer publisher, Steven Brill, including as panelists: Alfred Byrne, Federal Deposit Insurance Corporation; Bernard Nussbaum, partner with Wachtell, Lipton, Rosen & Katz; Robert O’Malley, Attorneys’ Liability Assurance Society (ALAS); and Stephen Gillers, law professor, NYU Law School; taken from a colloquy between Robert O’Malley and Steven Brill).

126 Id. To understand malpractice costs relative to the revenue from legal services in the United States, compare the more than $256 billion in legal services revenue generated in 2013. By 2018, this revenue is anticipated to increase to approximately $288 billion. Industry revenue has increased each year since the 2009 global recession. See Legal Services Industry in the U.S., STATISTA, https://www.statista.com/topics/2137/legal-services-industry-in-the-us/ (last visited Nov. 11, 2017).

127 PROFILE OF LEGAL MALPRACTICE CLAIMS, supra note 9, at 9. The ABA Standing Committee on Lawyers’ Professional Liability used different data collection methodologies in 1985 than in any of the studies since that year. The studies from 1995 through 2015 are based on calendar-year summary report forms completed by participating companies based on their own internal data. The data is limited to participating carriers. Some carriers declined to participate. Uninsured lawyers’ claims are not represented. The study captures data on claims frequency in various categories of practice; however, the study lacks data necessary to adjust those numbers to reflect how much of the practice of law is devoted to those particular subject areas. For example, where there is a high incidence of claims in a practice type, the study does not show whether that percentage is disproportionate to the time spent in that practice area or whether the incidence of claims correlates with changes in the number of attorneys practicing in the subject area. Id. at 9–10.

128 Id. at 5.

129 Id. at 22 tbl.8: Total Dollars Paid (Defense and Indemnity/Settlements). This is a reversal from the 2011 Study showing the majority of claims paid nothing. Id. The categories by dollar amounts paid have fewer claims as the dollar amounts
From 2011 to 2015 the number of claims made rose by more than twenty percent, and paid claims of one million dollars or more rose almost nine-fold. In short, the number of claims continues to rise as does the amount of recovery in each category of dollars paid. The trajectory of the increase in the number of claims and in the dollar amounts of paid claims is alarming.

The frequency of claims, the kinds of errors, and the amounts paid to claimants vary according to practice type. Practices that primarily represent individuals are far less likely to be insured and the losses to claimants are smaller in relative terms, making it more difficult for these claimants to find an attorney to handle the claim. Another cost of the increased number of malpractice claims can be measured in time spent in the resolution of those claims. The actual value of the time lost from an attorney’s practice while dealing with a claim is not measured and summarized in the ABA report. However, while most claims were resolved within one year of claim filing, almost two-thirds of all claims took more than six months to process from file opening to file closing. Not only do attorneys lose a substantial amount of time from their practice while resolving claims, anecdotal evidence suggests that another time-related cost can be measured in stress. For lawyers who are subject to a claim, the months of added pressure, the fears of professional embarrassment, a money judgment, and an ethical sanction, compound the normal day-to-day stressors of law practice.

increase with the top dollar category of over $5 million at twenty-eight claims or 0.04% of all claims. Id.

130 Id.
131 Id. (numbers reflect all dollars paid on claims including defense costs and indemnity of settlement payments).
133 See generally PROFILE OF LEGAL MALPRACTICE CLAIMS, supra note 9. The dollar value of the actual time lost in working with a professional liability carrier to resolve a claim varies by attorney and claim and because of varying fee structures is difficult to predict with accuracy.
134 Id. at 25 tbl.10.
135 Id. at 25.
136 Over the course of forty years of practicing law, the author talked with attorneys who had a claim against them. Some endured jury trials before being vindicated. Each attorney acknowledged the stressfulness of having her professional image drawn into question.
Dollars aside, one of the greatest costs of legal malpractice is the damage to the image of the profession. Law students, the bar, and the public are keenly aware of society’s criticisms of the profession. \[^{137}\] They know that the image of lawyers is no longer that of Jefferson or Lincoln. \[^{138}\] Among the ten occupations that the Pew Research Center survey asked respondents to rate, lawyers are last on the list, and a third of respondents said that lawyers contribute “not very much or nothing at all” to society. \[^{139}\]

One way to rehabilitate the professional image of attorneys is to address the issue of preventable malpractice and implement changes in the practice of law that will safeguard practitioners and clients alike. Only then will the bloodletting stop. \[^{140}\]

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\[^{137}\] One biological scientist said to another: “[W]e have switched from mice to lawyers for our experiments?” "Really?" the other replied, "Why did you switch?" "Well, for three reasons. First we found that lawyers are far more plentiful, second, the lab assistants don’t get so attached to them, and thirdly there are some things even a rat won’t do.” *World’s Best (and Worst) Lawyer Jokes*, LAWYERS WEEKLY (Apr. 21, 2010), https://www.lawyersweekly.com.au/folklaw/6045-world-s-best-and-worst-lawyer-jokes.

\[^{138}\] Thomas Jefferson served as the first Secretary of State, the second Vice President, and the third President of the United States; wrote the first draft of the Declaration of Independence in 1776, and the Virginia Statute for Religious Freedom in 1777, which became a model for the First Amendment of the United States Constitution, advocated for free public education in 1779, made the Louisiana Purchase in 1803, effectively doubling the size of the United States, and popularized macaroni and cheese. Abraham Lincoln led the Union to victory in the Civil War; issued the Emancipation Proclamation authorizing the Union Army to protect escaped slaves; and signed the 13th Amendment to the Constitution, permanently abolishing slavery in the United States. Both men practiced law and are highly regarded as great Presidents.


\[^{140}\] Bloodletting was commonly practiced in the United States during the time of George Washington. Most historians and medical authorities have concluded that Washington’s loss of blood from the bleeding was a major cause of his death. This historical event is the basis of the joke about the lawyer and doctor disputing the quality of their professions with the lawyer retorting, "When your professional forefathers were putting leeches on George Washington’s ass, my professional forefathers were writing the Declaration of Independence." See George Washington
C. Malpractice Claims by Area of Law

“Collection and bankruptcy” as a category ranks number five among practice areas with the highest number of claims. In 2015, bankruptcy and collections represented ten percent of all claims.

While clinical programs in most subject areas could conceivably benefit from the pedagogical use of decision trees, the bankruptcy category was chosen for this article by the author for reasons set forth below in Part IV.B. of this Article. It is worth noting that because of the broad scope of bankruptcy proceedings, many other practice areas, especially family law, often intersect with bankruptcy practice. To the extent these areas are susceptible to decision tree analysis, there is no reason that fundamental analysis of common questions could not be included in future versions of the bankruptcy prototype, so that the analysis is available in appropriate cases.

141 PROFILE OF LEGAL MALPRACTICE CLAIMS, supra note 9, at 28 app. A: Definitions. Collection and Bankruptcy includes all aspects of the federal bankruptcy law, including, but not limited to, personal and business bankruptcies, reorganizations, liquidations, receiverships, and the rights, obligations and remedies of trustees; state insolvency laws, attachment, garnishment, replevin and repossession proceedings; practice before the Bankruptcy Court and other federal and state courts.

142 Id. at 11 tbl.1. The data from each edition is referred to by the concluding year of the study and includes the prior years that are included in the study. For example, the 1995 study includes 1990–1995 data collection.

143 See infra Part IV.B.

D. Client Relations and Client Management Errors

Ironically, negligence in the handling of the attorney-client relationship, as opposed to negligence in the rendition of legal services, has been said to account for as much as one-fourth or more of legal malpractice claims.\textsuperscript{145} In other words, the client is subjectively dissatisfied and faults the attorney for an unfavorable result. The real “error” is the attorney’s failure to communicate sufficiently with the client and, thereby, correct the client’s expectations regarding the reality of a legal problem or the degree of difficulty in resolving it.\textsuperscript{146}

Stated another way, the issue relates to the client’s misperception of the quality of the representation, rather than a deficiency in the work performed. This result usually occurs because of poor client management and poor client communications in failing to state clearly the risks attendant with the legal matter.\textsuperscript{147} The well-intended attorney, who reassures and consoles the client to reduce the client’s anxiety, cannot and must not neglect to apprise the client of the unavoidable risks and dangers in the representation. By identifying and explaining the risks inherent in a legal matter the attorney compels the client to accept a realistic view of all possible outcomes.\textsuperscript{148}

The attorney’s responsibility is to engage the client in a conversation about the legal options available, the risks, benefits, and costs of each option, and let the client choose the course of action.\textsuperscript{149} However, the size of this malpractice category illustrates the value of a tool that can assist attorneys in spotting

\begin{footnotesize}
\begin{enumerate}
\item Mallen, supra note 120, at 209. \textit{See}, e.g., Neville v. Davinroy, 355 N.E.2d 86, 87 (Ill. App. Ct. 1976) (involving claims against attorney by former client that attorney had failed to sufficiently advise client of his rights and of certain facts).
\item RONALD E. MALLEN & VICTOR B., LEVIT, LEGAL MALPRACTICE 631–60 §17, (West 1977) [hereinafter MALLEN & LEVIT]. Mallen, supra note 120, at 209.
\item PROFILE OF LEGAL MALPRACTICE CLAIMS, supra note 9, at 18. The ABA Profile study breaks these claims into three subcategories: (1) failure to obtain consent or inform client; (2) failure to follow client’s instruction; (3) improper withdrawal or representation.
\item MALLEN & LEVIT, supra note 146, at §17; Mallen, supra note 120, at 209.
\item MODEL RULES OF PROF’L CONDUCT r. 1.2(a) (AM. BAR ASS’N 2015) (“[A] lawyer shall abide by a client’s decisions concerning the objectives of representation and, as required by Rule 1.4, shall consult with the client as to the means by which they are to be pursued.”).
\end{enumerate}
\end{footnotesize}
the issues, gathering the facts, analyzing the problem, prompting a discussion of the risks and possible outcomes, and reminding the attorney to memorialize communications on this point.

E. Negligence Errors in Malpractice Claims

Negligence is the category most often associated with legal malpractice. The predicate for these actions is that the attorney has committed a professional error that would have been avoided by a “competent” attorney whose theoretical conduct conforms to the appropriate standard of care. These actions may be based on a documented error of judgment that injures the client. However, an error of judgment is not the same as a determination regarding whether the attorney was negligent. In fact, the attorney’s misjudgment may be irrelevant to the negligence issue when the issue of law was unsettled or debatable. Likewise, malpractice claims may fail based on the absence of any provable damages. If the alleged error occurred during litigation, which could not have been successfully prosecuted, then there is no liability.

Finally, even when a malpractice claimant can prove that a favorable judgment could have been recovered, the claimant’s inability to demonstrate the collectability of the judgment may be fatal to recovery. These obstacles to recovery aside, every claim requires that the attorney place her professional liability insurance carrier on notice of the claim, defend the action, and suffer whatever damage may result from the injury to her

150 Mallen, supra note 120, at 209–10.
152 But see Smith v. Lewis, 530 P.2d 589, 600 (Cal. 1975) (finding that although the issue of law was actually debatable, the attorney had failed to conduct research to determine that fact). Mallen, supra note 120, at 210.
153 E.g., Jones v. Wright, 91 S.E. 265, 266 (Ga. Ct. App. 1917). See W.E. Shipley, Annotation, Attorney’s Liability for Negligence in Preparing or Conducting Litigation, 45 A.L.R.2d 5 Art. 2 § 5[a] (1956) (holding that to recover for legal malpractice the claimant must establish both the validity of the claim and the solvency of the defendant).
154 Garrison, supra note 144, at 1581–83.
reputation in the community and within the bar. In fact, the injury to the attorney’s reputation and the damage to her practice may be the highest cost. The prevention of malpractice claims protects the individual practitioner, maintains the integrity of the bar, and preserves the image of our legal system as fair, honest and just.

A study by the American Bar Association shows that from 2000 to 2007 almost forty percent of alleged errors in legal malpractice claims could be described as “preventable errors.”\footnote{See Dan Pinnington, The Most Common Legal Malpractice Claims by Type of Alleged Error, ABA: LAW PRACTICE (July/Aug. 2010), http://www.americanbar.org/publications/law_practice_home/law_practice_archive/lpm_magazine_webonly_webonly07101.html.} The top four errors were (1) “failure to know/apply law,” (2) “planning error,” (3) “inadequate discovery/investigation,” and (4) “fail to file document: no deadline.”\footnote{Id.} These “preventable errors” are reduced or prevented by the use of the decision tree.

1. Failure To Know and Apply Law as Malpractice Error

Substantive errors make up over half of all claimed errors, and the failure to know or apply the law has been the most common malpractice error in the United States from 1985 to 2015.\footnote{PROFILE OF LEGAL MALPRACTICE CLAIMS, supra note 9, at 18.}

This category [of error] applies where the attorney was unaware of the legal principles involved, or where the attorney did the research but failed to ascertain the appropriate principles. It applies in instances of erroneous reasoning from known principles. The category also applies where the lawyer simply fails to see the legal implications of the known facts . . . \footnote{See Pinnington, supra note 155.}

Failure to Know or Apply the Law is the most common error, and the most preventable. The decision tree provides a step-by-step approach to assure that the user analyzes the law and the practical considerations, and becomes a tool for providing recommendations to the client. Potential error resulting from the lawyer’s failure to know or apply the law is diminished or eliminated as the tree addresses pre-filing considerations. These considerations include: (1) whether the debtor is legally eligible to file, (2) whether and to what extent the debtor’s debts are
dischargeable, (3) whether and to what extent the debtor’s property can be exempted, and (4) whether and to what extent the filing and subsequent proceedings may tend to incriminate the debtor or require invocation of the debtor’s Fifth Amendment privilege against self-incrimination. In short, these considerations are analyzed to determine whether filing is possible, practical and prudent.

2. Planning Error

Planning Error was the second highest alleged error in legal malpractice claims in the United States from 1985 to 2010. This category of error includes those involving allegedly wrong decisions where the lawyer knows the facts and the law. These mistakes can be characterized as strategy and judgment errors. This error represented ten percent of all legal malpractice claims. In other words, this error can occur when an attorney knows the facts and the law, and how to apply the facts to the law, but uses poor judgment or fails to plan strategically. Essentially, that lawyer is equipped with all the necessary information and still makes the wrong decision.


160 For examples of this type of error, see e.g., Rock v. Francis, 889 P.2d 1337 (Or. Ct. App. 1995) (holding that because of attorney’s malpractice in failing to properly file a complete Chapter 13 petition, clients were unable to continue in business, lost their home in foreclosure, and suffered damages from sale of home at a depressed price); Ward v. Dengle, 700 So. 2d 1310, 1311 (La. Ct. App. 1997) (holding malpractice action prescribed by one-year statute of limitations where attorney improperly filed Chapter 7 rather than Chapter 11 that would have enabled client to remain in possession of her assets, seek turnover of her assets, resist lifting of the automatic stay and distribution of exempt assets, and question value at which assets were sold); In re Pearson, 70 B.R. 202, 204 (Bankr. S.D. Fla. 1986) (holding that unfamiliarity with Chapter 13 requirements and reliance on a bankruptcy clerk do not constitute “inadvertent or excusable neglect” that would entitle the debtor to relief from dismissal of incomplete filing.).

161 Felicia Galati, What To Do When Legal Malpractice Arises, 24 NEV. LAW., May 2016, at 12.

162 PROFILE OF LEGAL MALPRACTICE CLAIMS, supra note 9, at 18, 31.


164 For an example of poor strategy and judgment as a planning error, see In re A&L Oil Co., 200 B.R. 21, 25 (Bankr. D.N.J. 1996) (holding that by voluntarily
Using a decision tree reduces Planning Error. A decision tree supplements strategy and judgment decisions, suggests a course of action based on the facts and law, and thus informs the recommendations of counsel. In the bankruptcy setting, the decision tree assists the user with strategy decisions such as whether the client is eligible to file bankruptcy; what type of bankruptcy filing is appropriate; what property should be included in the estate; which exemptions may be claimed; whether and which debts may be dischargeable; and whether the required disclosures may incriminate the client. The conclusions drawn serve to reduce or alleviate the tough calls regarding strategy and judgment by supplying recommendations based on current law and the facts of the particular case.

3. Inadequate Discovery or Investigation

Investigation Error was the third highest alleged error in legal malpractice claims in the United States from 2000 to 2015.\textsuperscript{165} This category of error includes cases alleging that facts which should have been discovered by the attorney in a careful investigation or in discovery procedures were not uncovered.\textsuperscript{166} This error represented 7.5\% of all legal malpractice claims.\textsuperscript{167}

Using a decision tree reduces the possibility of Investigation Error. By using the decision tree a student attorney would inevitably discover vital information necessary to make the critical pre-filing decision about whether to file the bankruptcy petition and schedules. In other words, the decision tree assists

\textsuperscript{165} PROFILE OF LEGAL MALPRACTICE CLAIMS, supra note 9, at 18, pt. E. tbl.5: Number of Claims by Type of Alleged Error.

\textsuperscript{166} Id. at 31.

\textsuperscript{167} Id. at 18, pt. E. tbl.5: Number of Claims by Type of Alleged Error.
student attorneys by providing the questions to ask and by prompting the user to investigate the facts to answer the question posed.

Fact investigation in the digital age means data mining every known repository of information, whether public or private. The goal is to retrieve the information necessary to perform the legal services necessitated by the employment and to uncover any misinformation provided by the client. The lawyer’s ability to document her competency and diligence through a memorialized contemporaneous business record is a critical prophylactic in the fight against alleged professional error.\textsuperscript{168}

4. Failure to File Documents: No Deadline

Failure to File Documents: No Deadline has declined from the highest alleged error in legal malpractice claims in the United States in 1985 at eleven percent to four percent in 2015.\textsuperscript{169} This category of error applies where the attorney fails to file a document that is necessary to protect a client’s interest against the claim of another party when there is no specific deadline date.\textsuperscript{170} While the frequency of this error has declined, the inclusion of this category is appropriate in the discussion of legal malpractice because this error is largely preventable.

Examples in the bankruptcy context are the filing of the credit counseling certificate, the debtor education certificate, and the filing of reaffirmation agreements.\textsuperscript{171} Other examples include

\textsuperscript{168} The decision tree’s capabilities include the use of embedded hypertext links to sources of information that are essential to fact investigation. Examples are links to court records, real estate information and valuation sites like Zillow.com, vehicle valuation sites like Bluebook.com, and personal property valuation at sites like Craigslist.com. In Arkansas, repositories of court records include the District Court Clerk and other inferior courts, the Circuit Clerk and County Clerk, the Clerk of the Arkansas Supreme Court, and the clerks for the United States Bankruptcy Court and the United States District Courts for the Eastern and Western Districts. Records of appellate cases may be checked through the database for the United States Courts of Appeals (includes records for Bankruptcy Appellate Panel), and the United States Supreme Court. There is no single database for all court records, so each must be checked separately. PACER may be used for all federal jurisdictions.

\textsuperscript{169} PROFILE OF LEGAL MALPRACTICE CLAIMS, supra note 9, at 18, pt. E.

\textsuperscript{170} Id. at 30.

\textsuperscript{171} 11 U.S.C. § 109(h)(1) (2012). An individual may not be a debtor unless during the 180-day period prior to the filing the individual received credit counseling. 11 U.S.C. § 727(a)(11) (2012). A debtor may not receive a discharge unless the debtor completes a personal financial management course. See In re Loftin, No. 2012-057,
motions to avoid a judicial lien, and motions to avoid a non-
possessory non-purchase money lien, to the extent that those
liens impair an exemption the debtor might otherwise claim.\textsuperscript{172}
While there are no specific dates for these filings, all are rules
driven and must be filed prior to discharge.

The decision tree reduces the Fail to File Document: No
Deadline error by providing the threshold legal analysis needed
prior to filing, and prompting identification of secured property
interests that require reaffirmation, redemption, or a motion to
avoid lien. The bankruptcy questions on filing eligibility and
exemption eligibility in the decision tree highlight specific
requirements in the voluntary petition, the listing of assets, the
debtor's equity in property, gifts, valuation of property, and other
filings. The decision tree prompts the student to consider what
will be required in a filing and ensures that client-specific,
attorney-generated deadlines are created and calendared prior to
filing.\textsuperscript{173}

III. THE USES AND BENEFITS OF THE DECISION TREE IN CLINICAL
PEDAGOGY

A. Creating a Tree

Much like its namesake, a decision tree is a complex and
interwoven root system. The integrity of the system is protected
by firewalls protecting the internal integrity of the tree. The use
of daily electronic search queries to update the law propelling the
decision tree results in the tree being alive and growing in its
branching logic.

\textsuperscript{172} 11 U.S.C. § 522(f)(1)–(2) (2012). These motions have no specific date by which
they must be filed and served; however, like the reaffirmation agreement, each
motion must be filed before the date the discharge order is issued by the court.

\textsuperscript{173} This is analogous to the use of critical path software in project management
to plot the sequence of stages determining the minimum time needed for an
operation.
As the law changes, some questions in the tree become obsolete or change in significant ways. As older laws are overturned or repealed, the tree adapts to the changing season and maintains its relevance and integrity. The law-driven updates to the decision tree, leave a record of the chronological growth and history of the tree over time.

B. Protecting Clients and Beginning Lawyers from Professional Error

The student in the clinical setting in bankruptcy is often representing her first client. She is anxious and keenly aware of her lack of experience and her designation as a “student attorney.” She knows that there is only one way to get real-world experience, by learning to practice on the job. So, she places her trust in the experience of her supervising clinical faculty.

Live-client poverty clinics are teaching law firms with the greenest lawyers, the highest turnover rates, the poorest clients, and the smallest staffs.174 The clinics take on some of the most powerful adversaries. In the bankruptcy setting, students represent indigent clients in litigation to discharge student loan debt. These lawsuits are often against the Department of Education, and the United States Attorney serves as opposing counsel.175 Each student knows that the ethical responsibilities imposed by the Model Rules do not vary according to the resources of the respective parties. While the student may not be able to articulate the source of her anxiety, it is that she cannot know what she does not know. She wants to rely on the theory

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174 See generally ROBERT R. KUEHN AND DAVID A. SANTACROCE, CTR. FOR THE STUDY OF APPLIED LEGAL EDUC., 2013-2014 SURVEY OF APPLIED LEGAL EDUCATION 17 (2014) [hereinafter CSALE]. Students are generally in their second or third year of law school because of the prerequisites required by student practice rules and the law school. Students are often representing clients for the first time, and most leave the clinic after one academic term (74.1%) or after two terms (21.9%). Clinics usually have financial eligibility requirements designed to provide access to justice for the poor. The ratio of staff to faculty or students is lower than the typical ratio of staff to lawyers in private firms, and the lack of administrative or secretarial support is cited as a major challenge by 26.3% of respondents. See id. at 14.

175 The Department of Education may elect to use its own counsel or request representation by the United States Attorney in the district where the case is pending.
and skills training in her background. She has trusted the academy to prepare her for this moment, but she has reservations.

Like a teenager learning to drive, there is comfort in having an experienced instructor in the passenger seat. With no reservoir of personal experience to rely on, she feels a sensation of putting herself at risk, and perhaps more terrifying, she feels she may be putting others at risk. Such is life in the clinic.

Even routine legal matters provide high drama for students in the live-client setting. To complicate matters further, the clinical work frequently must be completed in the course of the 14-week semester. The quick turnaround makes it impossible to shoehorn a Chapter 7 bankruptcy into an academic term. Cases and clients must be carried over from semester to semester. Pedagogically, this requires teaching students the skill set encompassing the intake interview through the 341 meeting of creditors\(^{176}\) in a new case, and using older cases to illustrate what a discharge\(^{177}\) looks like, to teach writing the exit letter, and to instruct on closing the file for archiving.

Thus, the nature of compressing a practice skill set into an academic calendar requires fast tracking the disposition of cases. Some students may have taken courses on interviewing and counseling, debtor-creditor law, or bankruptcy, but the prior coursework, job experience, and life experience varies for each student. The common denominator for students is their attraction to bankruptcy and a desire to help those less fortunate than themselves.\(^ {178}\)

\(^{176}\) 11 U.S.C. § 341(a)–(b) (2012). This provision of the Code provides for the examination under oath of the debtor by the trustee and any creditors who choose to appear individually or by and through their representatives.


\(^{178}\) CSALE, supra note 174.

Three hundred fourteen clinics reported a total of 1,040,132 estimated hours of pro bono civil legal services provided by the students in the clinic during the 2012-13 academic year, or about 3,313 hours per clinic. Extrapolating to all law clinics at all ABA-accredited law schools, the estimated total amount of free civil legal services delivered by the students in law clinics during the 2012-13 academic year was over 3.4 million hours.

Id.
The decision tree offers many benefits to students and clients. One benefit is meeting students’ need for help in their analysis through a trustworthy source. The questions, answers, and citations of authority represent the bankruptcy pre-filing analysis that clinical faculty perform routinely in a one-on-one fashion. Another benefit is that it tends to put students more at ease and remove some of the traditional roadblocks to their working without immediate access to their supervisor. The decision tree’s remote access feature permits the students to have access to faculty expertise without the presence of the supervisor. This gives students the flexibility to work wherever and whenever they want with a sense that they are on the right track and protecting their clients’ interests. Students feel less stress and can better gauge the quality of their analysis in representation.

C. Indoctrinating Students in the Law, Procedure, and Ethics

For pedagogical purposes the inclusion of a citation of legal authority for every question posed is an indispensable component of any system designed for clinical use. The presence of the citation as a hypertext link helps to visually imprint the connection between the particular question and the source of law. For the uninitiated student, the citation link offers a quick and easy way to immediately review the legal underpinning for each question. For the more experienced student, the link provides a way to easily confirm the currency of the law and to become familiar with a provision in the context of the client’s case.

Historically, law students are required to navigate the law themselves in order to find the applicable law and then apply it to the facts at hand. Thus, the notion of supplying the questions necessary for analysis seems counterproductive. However, access to the decision tree can be withheld until each student has had ample opportunity to investigate the facts, wrestle with the issues, and draft a memo documenting the fact gathering and the analysis in each case. At this point, the supervising attorney and the student can see the status of the matter. The student’s use of the decision tree reveals the accuracy of the analysis outlined in the memo. Together the memo and the decision tree provide analytical “before and after” photos, respectively.
In this way, the benefits of challenging students to develop their research, fact investigation, and analytical skills are not lost. Instead, the decision tree serves to check the capabilities of each student rather than supplant thoughtful analysis. In short, clinical pedagogy involves a process that records the investigation and analysis of the student and compares the student's work before and after the decision tree is used. This teaching method first challenges the student's investigative and analytical abilities, then checks the accuracy of the student's work using the decision tree to ensure the student's comprehension of fundamental concepts and to protect the client from professional error.179

D. Providing a Useful Tool To Assist in Clinical Supervision

Clinical faculty are charged with the supervision of students in live-client clinics under the Model Rules of Professional Conduct and under state and federal rules governing admission of law students to practice.180 In like fashion, clinical students, as subordinate lawyers, are bound by the rules of professional conduct regardless of the fact that they are acting at the direction of a supervising attorney.181 However, the student as a


180 MODEL RULES OF PROF'L CONDUCT r. 5.1(b)–(c) (A M. BAR ASS'N 2015) (“A lawyer having direct supervisory authority over another lawyer shall make reasonable efforts to ensure that the other lawyer conforms to the Rules of Professional Conduct... A lawyer shall be responsible for another lawyer's violation of the Rules of Professional Conduct if: (1) the lawyer orders or, with knowledge of the specific conduct, ratifies the conduct involved; or (2) . . . has direct supervisory authority over the other lawyer, and knows of the conduct at a time when its consequences can be avoided or mitigated but fails to take reasonable remedial action.”). For an example of a state student practice rule making the Rules of Professional Conduct applicable to student practice, see ADMISSION TO THE BAR r. 15(b)(3), (c)(6) (Ark. Judiciary 1998). See also, e.g., STUDENT PRACTICE RULES, GEN. ORDER NO. 41 (W. Dist. Ark. Mar. 12, 2012), http://www.arwd.uscourts.gov/sites/arwd/files/generals-orders/41.pdf (last visited Nov. 11, 2017).

181 MODEL RULES OF PROF'L CONDUCT r. 5.2(a)–(b) (A M. BAR ASS'N 2015) (“A lawyer is bound by the Rules of Professional Conduct notwithstanding that the
subordinate lawyer is insulated from a violation of the rules if she acts at the direction of the supervisory lawyer unless she knew that her action violated the rules.\textsuperscript{182} Students are also shielded from a violation of the rules when they act in conformity with a supervisor's reasonable resolution of an arguable question of professional duty.\textsuperscript{183}

These rules taken together require clinical faculty and students to meet regularly in addition to the classroom component of the clinical course.\textsuperscript{184} This is often done in two ways. The first way is the one-on-one sessions common to clinical teaching.\textsuperscript{185} In these sessions, the students meet individually with the supervisor to discuss the details of the representation. Typically, the facts of the case are recited and students offer a preliminary assessment of what should be done and when it should be done. The supervisor is then in a position to use a question and answer exchange to nudge the students from where they are in their analysis to where they need to be, and assist them in formulating a task list and a time line appropriate to the case.

\textsuperscript{182} MODEL RULES OF PROF'L CONDUCT r. 5.2 cmt. 1 (A M. BAR ASS'N 2015) (“For example, if a subordinate filed a frivolous pleading at the direction of a supervisor, the subordinate would not be guilty of a professional violation unless the subordinate knew of the document’s frivolous character.”).

\textsuperscript{183} MODEL RULES OF PROF'L CONDUCT r. 5.2(b) (A M. BAR ASS'N 2015). See MODEL RULES OF PROF'L CONDUCT r. 5.2 cmt. 2 (“If the question is reasonably arguable, someone has to decide upon the course of action. That authority ordinarily reposes in the supervisor, and a subordinate may be guided accordingly. For example, if a question arises whether the interests of two clients conflict under Rule 1.7, the supervisor’s reasonable resolution of the question should protect the subordinate professionally if the resolution is subsequently challenged.”).

\textsuperscript{184} For an excellent clinical seminar text see DEBORAH EPSTEIN, JANE H. AIKEN & WALLACE J. MLYNIEC, THE CLINIC SEMINAR (2014) [hereinafter THE CLINIC SEMINAR].

The second way clinical faculty supervises students is the scheduling of case rounds in which the students report on their assigned cases. This meeting may take place during a class period or at a separately scheduled time and includes all of the students in the class. Case rounds serve a pedagogical goal distinct from the classroom teaching and the one-on-one sessions because they give each student an opportunity to learn from the experiences of the other students. In that way students gain insight that may be useful in their assigned cases and offer suggestions that may be helpful to their classmates.

The process of supervising eight or more students who are both new to a particular subject area of the law and to the practice of law is time-consuming. In addition to teaching the classroom component, conducting case rounds, and instructing students in the one-on-one sessions, clinical faculty are charged with reviewing and approving the correspondence, documents, and pleadings generated by the students. Clinical faculty review and approve the students’ advice to clients and the handling of client funds. As supervisory lawyers, they prepare students for client meetings, negotiations, and court appearances, while assisting in the administration of the clinic as a functioning law firm. It is only when viewed in the aggregate that these duties are unique to clinical teaching. However, these duties must be performed in conjunction with the other academic responsibilities that all law faculty perform, such as committee service, and scholarly research and writing.

As important as it is to list what clinical faculty do and how they do it in order to gain a better understanding of the clinical teaching environment, to stop there would be to miss one of the most important aspects of clinical teaching. That is the clinician’s willingness to be accessible to all of the students at all times. Supervising attorneys in litigation cannot assume that student requests for assistance outside the normal workday can go unattended because they cannot afford to ignore the needs of subordinate attorneys and their clients. Neither can they assume that the clients’ welfare will be protected if they relinquish their supervisory role when they are needed.

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186 THE CLINIC SEMINAR, supra note 184, at 757–59.
It is only against this backdrop that the value and utility of the decision tree in clinical pedagogy can be fully appreciated. The design and construction of the tree requires a substantial front-end investment of time and energy. To justify this investment requires that the payoff be amortized over the long term and viewed as a shared resource that can allow other clinicians to realize its benefits. The precise value from time saved through use of the decision tree in supervision is difficult to quantify, but impossible to overestimate.

Some clinical faculty track the time spent performing case analysis in all of the settings discussed above. For most clinicians, records of that aspect of their teaching are not kept because it is so routine. A diagnostic tool that supplements the case analysis and advice of an experienced supervisor is of great assistance to clinical faculty.

E. Improving Institutional Risk Management

ABA studies show growth in the number of malpractice claims and an increase in large claims and indemnity payments. There is some evidence to indicate that the increase in indemnity payments is the result of two trends. One is a rise in litigation expenses, and the other is the fear of exceeding policy limits where lower limit policies are involved. In short, it makes more sense financially for an insurer to settle earlier rather than risk having litigation expenses match or exceed policy limits.187

This phenomenon is exacerbated by the efforts of the plaintiffs’ attorney to position the insurance carrier for a bad faith or extra-contractual claim. Thus, many more claims are settled despite the fact that the claims have little merit. The dynamic between the risk of litigation expense versus frivolous claims occurs more frequently in the smaller firm environment because the larger firms often have higher deductibles—or self-insured reserves—that give them greater control over contesting frivolous claims and fighting on principle.188

Malpractice data in the area of bankruptcy and collection claims show growth in both areas.189 Initially, bankruptcy filings swelled to over two million in 2005 with the threat of statutory

187 PROFILE OF LEGAL MALPRACTICE CLAIMS, supra note 9, at 26.

188 Id.

189 Id. at 27.
2017] 

**COMBATING PROFESSIONAL ERROR**

reform looming in a pro-creditor political environment. Filings declined following the passage of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 ("BAPCPA") and then rose again, spiking in 2008 in the wake of the Great Recession. While consumer bankruptcies have declined over the past nine years, Chapter 7 filings have averaged over 770,000 per year. Non-consumer bankruptcy filings were up twelve percent from 2014 to 2015. The increase in filings is generating more legal malpractice claims. Trustees in non-consumer cases are often more comfortable pursuing malpractice claims to recover losses in failed business ventures because they have no personal connection to the targeted attorneys.

**F. Fostering Judicial Economy**

Of the 1,037,603 consumer bankruptcy cases filed on or after October 17, 2006, and closed in 2014, sanctions were imposed against debtors' attorneys in forty-six cases, with damages totaling $54,000. Something went wrong in these cases. The statistics do not reveal the nature of the attorney error, but malpractice statistics show that there is a chance the errors were preventable. Roughly half of Chapter 13 consumer cases filed on or after October 17, 2006, were dismissed. The statistics do not show the basis for dismissal; however, the prevention of unnecessary filings is an opportunity to foster judicial economy.

The decision tree analysis assists the student in determining the debtor's entity eligibility for Chapter 7. The means test analysis embedded in the decision tree indicates whether a debtor is financially eligible for Chapter 7. If the debtor is eligible for either Chapter 7 or Chapter 13, the decision tree

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193 PROFILE OF LEGAL MALPRACTICE CLAIMS, supra note 9, at 27.

194 Id.


196 Id. tbl.6.
helps with the more nuanced decision regarding choice of chapter. The decision tree also assists the student in determining whether the debtor may qualify for a Chapter 12 filing as a “family farmer” or “family fisherman” with regular income.

When a debtor’s bankruptcy case is filed in the wrong chapter, the initial filing must be converted or dismissed. The decision tree improves the quality of decision making prior to filing and assists the student in helping the debtor avoid filing the wrong chapter or filing unnecessarily, thus reducing the court’s docket. This saves the court’s time, the client’s money, and the attorney’s embarrassment.

The significance of reducing dismissals in bankruptcy is better appreciated when compared to federal civil filings in United States District Court. In 2016, there were 291,851 civil filings, compared to 771,968 bankruptcy filings.

G. Promoting Access to Justice

A study by the Administrative Office of U.S. Courts tracked the number of bankruptcy filings by debtors with counsel and those filing pro se. The study began after the effective date of the BAPCPA and ended June 30, 2011. During the five-year period, total filings increased dramatically. Bankruptcy debtors with counsel increased ninety-eight percent during the five-year period of the study. By contrast, pro se bankruptcy filings rose by 187%.

The report offers little insight into the possible causes for the dramatic increase in pro se filers. Bar leaders cite bankruptcy reform, the state of the economy, and the ease of access to Internet resources as contributing factors. The increased pro se filings have a geographical component as well. The parts of the country that experienced the highest rates of foreclosure and unemployment saw the most dramatic increase in pro se filings. Another factor is that the increased obligations on attorneys and debtors under BAPCPA make bankruptcy representation too expensive for many debtors, forcing them to risk filing pro se. Congress enacted the reform provisions of BAPCPA to remedy perceived abuses of the bankruptcy system. The result was to increase the potential liability of bankruptcy attorneys.

The increased exposure of bankruptcy counsel, particularly in Chapter 7 cases, makes attorneys less likely to accept cases at a reduced rate or on a pro bono basis. This is unfortunate because the pro se filings burden the court system and deny insolvent debtors access to justice. Neither the trustees, the court clerks, the court staff, nor the bankruptcy petition preparers can advise pro se filers on legal matters.
Sadly, after BAPCPA’s passage in 2005 and throughout the Great Recession, consumer bankruptcies rose, demand for bankruptcy increased, legal fees escalated, and debtors were increasingly priced out of the market for bankruptcy representation.\textsuperscript{210} The additional costs under BAPCPA include increased filing fees, debtor counseling fees, debtor education fees, trustee fees, expenses, and attorney fees.\textsuperscript{211} The improvement in access to justice sought by the state bar trend towards unbundling legal services but did not affect federal regulation of bankruptcy services.\textsuperscript{212}

\textsuperscript{209} With regard to non-lawyers in the clerk’s office, state rules against the unauthorized practice of law prevent non-lawyers from engaging in the practice of law which includes legal advice. See Derek A. Denckla, \textit{Nonlawyers and the Unauthorized Practice of Law: An Overview of the Legal and Ethical Parameters}, 67 FORDHAM L. REV. 2581, 2581 (1999). 11 U.S.C. § 110(e)(2)(A) (2012) states that “[a] bankruptcy petition preparer may not offer a potential bankruptcy debtor any legal advice. . . .” 11 U.S.C. §110(k) provides that “[n]othing in this section shall be construed to permit activities that are otherwise prohibited by law, including rules and laws that prohibit the unauthorized practice of law.” The trustee and attorneys for the trustee represent the estate of the debtor and are under a fiduciary responsibility to the unsecured creditors to maximize the recovery of non-exempt assets for distribution to the creditors. The Model Rules of Professional Conduct provide “[t]he lawyer shall not give legal advice to an unrepresented person, other than the advice to secure counsel, if the lawyer knows or reasonably should know that the interests of such a person are or have a reasonable possibility of being in conflict with the interests of the client.” MODEL RULES OF PROF’L CONDUCT r. 4.3 (AM. BAR ASS’N. 2015); U.S. Bankruptcy Court Judges and U.S. District Court Judges are subject to Code of Conduct for United States Judges, which states “[a] judge should respect and comply with the law and should act at all times in a manner that promotes public confidence in the integrity and impartiality of the judiciary.” CODE OF CONDUCT FOR UNITED STATES JUDGES, Canon 2(A) (JUDICIAL CONF. 1973, amended 2014).

\textsuperscript{210} Lupica, supra note 204, at 46; see also Henry J. Sommer, \textit{Trying To Make Sense Out Of Nonsense: Representing Consumers Under the “Bankruptcy Abuse Prevention and Consumer Protection Act of 2005”}, 79 AM. BANKR. L.J. 191, 230 (2005) (“There is no question that the provisions of the Bankruptcy Code have been changed in many significant respects. There is also no question that many debtors, especially those priced out of bankruptcy relief due to increased costs, will be negatively impacted by those changes.”).

\textsuperscript{211} Lupica, supra note 204, at 46; see also sources cited supra note 204.

\textsuperscript{212} See, e.g., \textit{In re Seare}, 515 B.R. 599, 622 (B.A.P. 9th Cir. 2014) (holding unbundling or limited scope representation must comply with the rules of ethics and the Bankruptcy Code based on a qualitative analysis of each individual debtor’s case completed at intake to ensure that debtor’s reasonable goals and needs are met); \textit{In re Ruiz}, 515 B.R. 362, 367 (Bankr. M.D. Fla. 2014) (concluding attorneys cannot pick and choose the services they provide to Chapter 7 debtors). For more on unbundling of legal services, see \textit{Rules}, ABA STANDING COMM. ON THE DELIVERY OF LEGAL
Another reason for the increase in Chapter 7 pro se filers is that Chapter 7 attorneys must be paid up front to avoid an inherent conflict of interest in the filing. Otherwise, as counsel for the debtor, the attorney becomes a creditor of the debtor’s estate for the amount of the fees owed and unpaid. In contrast, attorneys in Chapter 13 cases can build their fees into the pay structure of the debtor’s plan and be paid with or ahead of other creditors in the estate.

The decision tree enables clinical programs to supervise students more safely and efficiently, increase enrollment, and improve access to justice. More prospective clients can be screened and unwarranted pro se filings can be reduced. The potential for increased access to justice for clinical programs is significant even in small numbers because of the importance of the services to an indigent population that represents the poorest of the poor. However, the effect is multiplied to the extent that other clinical programs offer bankruptcy representation and adopt the use of decision trees in the provision of bankruptcy services to the poor.


213 Lamie v. U.S. Trustee, 540 U.S. 526, 538–39 (2004) (holding Chapter 7 debtor’s attorney may not be compensated from the estate unless the attorney is employed by the trustee with approval of the court).

214 In re Paraday, No. 87 B 16892, 1988 WL 146944, at *6 (Bankr. N.D. Ill. May 6, 1988) (holding that the Code allows attorneys’ fees in Chapter 13 to be paid either before or concurrently with creditors’ claims so long as the payment of attorneys’ fees begins no later than the first payment to creditors) (citing In re Parker, 21 B.R. 692, 694 (Bankr. E.D. Tenn. 1982)). See 11 U.S.C. § 330(a)(4)(B) (“In a chapter 12 or chapter 13 case in which the debtor is an individual, the court may allow reasonable compensation to the debtor’s attorney for representing the interests of the debtor . . . .”). In Chapter 11 proceedings, courts have held that the timing of administrative expenses, including attorneys’ fees, is within the discretion of the court. See, e.g., Isis Foods, Inc. v. Flint Hills Foods, Inc. (In re Isis Foods), 27 B.R. 156, 157–58 (Bankr. W.D. Mo. 1982).

215 See Staudt & Medeiros, supra note 108, at 698 (proposing that clinics teach students core competencies in legal technology to help students think about solutions to the access to justice crisis).

216 See id. at 721 (stating that teaching students practice technologies can improve access to justice).

217 There are 204 ABA-approved law schools offering the J.D. degree. Three are provisionally approved, and two are on probation. ABA-Approved Law Schools, A.B.A., https://www.americanbar.org/groups/legal_education/resources/aba_approved_law_schools.html (last visited Nov. 11, 2017). Of these law schools, fifteen advertise a live-client clinic in Chapter 7 consumer bankruptcy. See Directory of
H. Rehabilitating and Reclaiming the Image of the Profession

“The first thing we do, let's kill all the lawyers.”\(^{218}\) The words of the bard may be a line from a play, but there is little doubt that they haunt the legal profession no less than the Bible's admonition to our medical counterparts, “Physician, heal thyself.”\(^ {219}\)

The problem with the professional image of lawyers is compounded by the growing number of malpractice claims.\(^ {220}\) Not surprisingly, the downward trend in the profession's image tracks with the ABA studies on legal malpractice.\(^ {221}\) It is even more troublesome that the data indicates most legal malpractice is preventable.\(^ {222}\) The use of the decision tree in the clinical setting offers a testing ground for the experimental use of a diagnostic tool that furnishes an opportunity to reduce “preventable malpractice.”\(^ {223}\) A cost-benefit analysis of the decision tree is not possible at this time, because its impact on reducing malpractice numbers cannot be quantified for comparison to the cost of design and construction.

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\(^ {218}\) WILLIAM SHAKESPEARE, THE SECOND PART OF KING HENRY THE SIXTH act 4, sc. 2.

\(^ {219}\) Luke 4:23 (King James Version). From the Latin Cura te ipsum. The phrase refers to the readiness of doctors to heal others while unable or unwilling to heal themselves.

\(^ {220}\) PROFILE OF LEGAL MALPRACTICE CLAIMS, supra note 9, at 18 pt. E. tbl.5.

\(^ {221}\) Public Esteem for Military Still High, supra note 139. The two Pew surveys measured relative public professional esteem of ten professions based on value and contributions to society. Lawyers were last in each survey faring worse in 2013 than in 2009. See Zaretzky, supra note 139.


\(^ {223}\) See supra Part II.A.
However, the cost to the profession of preventable malpractice as measured in dollars spent, in time lost, in reputations ruined, and in damage to an already tarnished profession is measurable in part, and the damage is staggering. The investment in this new pedagogical approach is worth trying because the potential benefits to clinical teaching, to students, to clients, and to the profession are so great.

IV. DESIGN AND CONSTRUCTION OF THE DECISION TREE

A. *Components of the Site and Design Consideration*

1. The Disclaimer

The design and construction of the site may take many forms, and what follows is not intended to discourage other approaches. As a preliminary matter, the decision tree needs a disclaimer clearly stating that it is not intended to provide legal advice and may not be relied upon by prospective clients, clients, or third parties. The disclaimer may be added at any point in the construction process. However, it should be prominently displayed and require electronic acknowledgement by the user before access to the decision tree is permitted.\(^{224}\)

2. The Front Page and Design Considerations

Even if the decision tree is only accessible to students in the clinical setting, the front page should bear the official logo and trademark of the law school, the University, and other institutional collaborators. If the site is to bear an original logo or trademark, then the intellectual property work should be initiated as soon as possible. University and law school policies regarding ownership of intellectual property will dictate the respective ownership interests of the author and the employer. Ideally, the task of including the trademarks and selecting a style should be postponed until the prototype has been completed to avoid adjusting to institutional changes in the requirements for websites during construction.\(^{225}\)

\(^{224}\) See *infra* Appendix A, Item 1.

\(^{225}\) See *infra* Appendix A, Item 2.
3. Teaching Practice Technologies to Students through Design Opportunities

Students “gain insight into emerging technologies at the center of modern law practice and also develop core competencies across a range of new and traditional lawyering skills.”\(^{226}\) Clinical faculty and students are equipped to test and evaluate the use of technology in delivering legal services.\(^{227}\) Involving students in the design and construction of a decision tree helps them understand the relationship of practice technologies to the practice of law.

Students are increasingly being taught with practice technologies in the clinical setting. More than a third of all clinics (36.7%) use cloud computing to teach students case management and allow students access to client related information.\(^{228}\) Nearly half of clinics (43.7%) use video recording of student work for feedback or supervision. Of the clinics using recordings, over half (51.6%) permit recording of student-client interaction.\(^{229}\) The fact that few clinics (7.3%) instruct students on courtroom presentation software is an indication of the need to emphasize teaching with and about technology.\(^{230}\)

Cybersecurity is another area of practice technology that students must be taught. Attorneys face new challenges from the use of electronic records and mobile devices.\(^{231}\) The threat of hackers targeting law firms is real and growing because the information held is valuable. Examples of this information include intellectual property, trade secrets, strategic business data, work-product containing litigation-related theories, and


\(^{227}\) See Vern R. Walker et al., *Law Schools as Knowledge Centers in the Digital Age*, 88 Chi.-Kent L. Rev. 879, 879–80 (2013) (proposing that law schools can critique the legal system and become knowledge centers by using digital technology).


\(^{229}\) Id.

\(^{230}\) Id.

data from e-discovery. Clinical students, clinical faculty, and law school IT departments work cooperatively in the practice of law and are well suited to be partners with the bar in the battle to combat cyber threats. The convenience of global access to the decision tree is lost if the site is not protected.

4. Other Design Matters

Other matters to consider include identification of the primary pre-filing considerations; mapping out the analysis attendant to each; construction and drafting of the syllogisms that relate to each analysis; designation of citations of supporting legal authority; sequencing and arranging the layers of analysis; drafting a “landing page” or introduction to each discrete subject area; choosing a web editor; construction of the website in “cells”; hypertext linking the citations to a database of legal resources; creating an online glossary of terms of art; linking the terms in the analysis to the glossary; preparing a spreadsheet for the daily search queries cross-referenced to the citation of authority in each cell; scanning and uploading of any related legal forms; and for the more adventurous designers—filming and editing of staged legal proceedings; and overdubbing audio instructions to narrate each video depiction of the skill set being taught.

B. Asking the Right Questions

In choosing a particular topic for decision tree analysis, it is important that the subject matter lends itself to the format and will be helpful to students. Bankruptcy cases comprise a

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232 Id. The Task Force found that the two most serious gaps in security programs are the absence of a disciplined process for the selection of security controls and ongoing reviews. See id. at 13. The Resolution urges private and public organizations to develop and test a response plan and engage in information sharing and cooperative relationships to address the problem of cyber threats. The ABA Cybersecurity Handbook: A Resource for Attorneys, Law Firms, and Business Professionals provides threat information, guidance to lawyers and explores the obligations of lawyers to clients in a cyberattack situation. JILL RHODES & VINCENT I. POLLEY, THE ABA CYBERSECURITY HANDBOOK: A RESOURCE FOR ATTORNEYS, LAW FIRMS, AND BUSINESS PROFESSIONALS (2013).

233 For example, the intake interview, the 341 meeting of creditors, and a reaffirmation hearing.

Bankruptcy filing eligibility is suited to the decision tree format because many issues are decided mathematically by dollar amounts and day counts. Other questions, such as the domicile of the debtor, have a limited number of possible responses. The need for clearly defined questions with a limited universe of responses is an important consideration in assessing feasibility and functionality.

The process of developing the questions to ask is another critical component. The Code is written in a typical statutory format. The provisions consist of declaratory sentences often with a string of dependent phrases.\footnote{See, e.g., 11 U.S.C. § 101 (2012).} It is rare to find a sentence posed as a question in any statutory context. Constructing a decision tree requires that student researchers learn an academic version of the game show Jeopardy! whereby declarative sentences or short phrases are converted to question format. Student researchers working on a decision tree project learn to spot and articulate key legal issues as they chart the appropriate analysis for the resolution of each question faced by the client. The same analytical process is used in problem solving in the clinical setting.

Formulating questions is a daunting task. In fact, there are over 660 questions organized in a non-linear fashion and linked together, allowing for over 435,000 possibilities. There are many lines of analysis that relate to the four pre-filing considerations. This is because of the multiple considerations for filing eligibility, dischargeability, exemption eligibility, and protecting the debtor’s privilege against self-incrimination. While the tree is designed to allow the student to access any of the component parts independently of the others, the structure is organized to suggest that the student explore the analyses in a logical sequence.

Broader questions are presented first, designed to rule out as many follow-up questions as possible. For example, in determining venue and eligibility for exemptions, if the debtor...
answers “yes” to having lived in the current state for two years, this answer limits the need for most follow-up questions on this topic.\textsuperscript{236} If the debtor answers no, more follow-up questions would be necessary to determine venue and eligibility.

The analysis for filing eligibility for an individual or joint consumer filing is the logical place to start. Statutory requirements are examined that may automatically disqualify a debtor, before moving on to more case specific issues, such as the debtor’s income that may impact the debtor’s ability to receive a discharge.

Much like a “choose your own adventure” book, the analysis may quickly lead to dead ends. If the first set of questions determines that the potential client is not eligible to file consumer Chapter 7 bankruptcy, the analysis will stop there.\textsuperscript{237} If the questions confirm that the potential client is statutorily eligible to file, the questions continue and explore issues related to dischargeability of debt and discharge in bankruptcy.\textsuperscript{238} A student will be able to quickly determine whether the debtor should file and when, based on whether a discharge can be granted, even if the debtor is eligible to file. These questions highlight to the student the importance of knowing when it is impractical for a client to file when technical filing eligibility exists.

The simple introduction to this segment of the tree gives an indication of the process. Questions identify distinguishing aspects of individual cases, ruling out unlikely issues in a methodical fashion, while highlighting any disparities and not letting minor details that could impact the filing slip by unnoticed.\textsuperscript{239}

\textsuperscript{236} 11 U.S.C. § 522(b)(3)(A) (2012) (requiring debtor to have domiciled 730 days to be eligible for exemptions in the state of filing); 28 U.S.C. § 1408 (2012) (establishing venue in any jurisdiction in which the debtor has had a domicile, residence, principal place of business, or principal place of assets for the greater portion of the 180 days preceding filing). \textit{But see} 11 U.S.C. § 522(p)(1) (2012) (placing a dollar cap on the debtor’s homestead exemption for homesteads acquired during the 1,215-day period preceding filing).

\textsuperscript{237} \textit{See} 11 U.S.C. § 109(a)–(h) (2012).


\textsuperscript{239} \textit{See infra} Appendix A, Item 3.
C. Exploring the Universe of Correct Answers

All choices in the digital world of computing analysis are binary, and to some extent that is true in the design of decision trees. There are a number of questions in legal and factual analysis which may be answered in a “yes or no” fashion. However, there are other questions which are not susceptible to a binary response. For example, in the choice of jurisdiction for purposes of the bankruptcy exemption analysis, the decision tree includes the fifty states, the District of Columbia, the U.S. territories, commonwealths, and possessions.

The critical design aspect is to imagine and include every possible answer to the greatest extent possible. For questions with an outsized number of potential responses or an unlimited number of responses, including that information makes the user aware of the uncertainty. In the decision tree many questions have only two choices, and some questions have more than two choices. To the greatest extent possible, the questions should be worded to limit the number of possible responses.²⁴⁰

D. Pinpointing the Citation of Legal Authority

Each question needs a citation of authority justifying its presence in the analysis and revealing the rationale for the universe of answers. It is sometimes necessary to include multiple citations with explanations; however, it is best to keep the analysis and the cells as simple as possible in a step-by-step process of revealing the questions to be considered.²⁴¹

E. Sequencing the Questions and Layering the Analysis

The sequencing of the questions in each analysis is important and discretionary. There are questions that simply need to be asked at some point in the analysis regardless of when that is. However, the value of the tree is increased to the extent questions are sequenced in the most efficient manner. In other words, when there is statistical or anecdotal evidence that the order of particular questions yields a definitive answer sooner, that sequence should be preferred.²⁴²

²⁴⁰ See infra Appendix A, Item 4.
²⁴¹ See infra Appendix A, Item 5.
²⁴² See infra Appendix A, Item 6.
F. Defining, Highlighting, and Linking the Terms of Art

One of the key design features in any tree is an online glossary. Law students understand that a term of art is a word or phrase defined to have a specific meaning in the context of a statute, case, rule, or regulation. However, students who are new to a subject area may not know what the terms are, and how the meaning of certain words and phrases can change depending on context. To ensure that the students recognize the terms of art, each one is hypertext linked to its definition so that the term or phrase has a distinctive color that sets it apart from the text. If the user knows the meaning of the term or phrase, then the program does not require that the user open the definition. However, the definition may be readily accessed if the user is unfamiliar with the term.

One example of the glossary’s value is the linking of terms used in the decision tree that are found in the Code. In those instances in which terms have been defined by case law, a link to the definition provided by the case is appropriate.

Glossary pop-up windows are activated by the movement of the cursor over the word or phrase to reveal the definition. This avoids having to navigate back to the last used screen that prompted the inquiry into the definition.

G. Research Prompts and Suggested Courses of Action

The goal of the analysis is to produce a concrete answer to the question posed on the facts at hand. However, there are legal issues that are undecided by the courts, and there are issues on which the higher courts have split. In either of these instances the correct answer is to acknowledge that the law is undecided or unclear. The tree is helpful in this situation because it highlights

243 11 U.S.C. § 101 (2012) (general provisions and definitions). Other definitions may be found interspersed with specific Code provisions relating to a particular subject or by cross-reference to statutes outside the Code. For example, “household goods” are defined at 11 U.S.C. § 522(f)(4)(A) (2012); the terms “inventory,” “new value,” and “receivable” are defined at 11 U.S.C. § 547(a)(1)–(3) (2012); and the term “value” is defined at 11 U.S.C. § 548(d)(2)(A) (2012), while the terms “charitable contribution,” “financial instrument,” and “qualified religious or charitable entity or organization” are defined by reference to the appropriate provisions of the Internal Revenue Code of 1986. See I.R.C. § 170(c) (West 2014) for “charitable contribution” and “charitable entity” and I.R.C. § 731(c)(2) (2012) for “financial instrument.”

244 See infra Appendix A, Item 7.
the uncertainty of the law. When there is no case on all fours with the client’s facts, the tree furnishes the user with cases that are relevant and persuasive. These “research prompts” include secondary sources as well, and are valuable in clarifying competing arguments and aiding the student attorney in formulating the strongest argument on behalf of the client.245

H. Database Management: The Care and Feeding of the Tree

Managing updates in bankruptcy law is performed through a ten-step process of database management. The website is designed with each individual page labeled with a distinct cell title that becomes the fingerprint identifier for that cell. The site is searched to collect each citation to case law, rule, or statute. The WestLaw Drafting Assistant or other reliable application is used to monitor updates in the law. The WestCheck “Generate Report” feature searches all the citations used within the tree. The report displays the current treatment on each case, statute or regulation, and is hyper-linked to the full version of the citation on WestLaw. This process checks for new law that alters any part of the analysis, and expedites updates to maintain the currency of the site.246

Drafting Assistant checks every citation at once, and the tree is then updated. If a citation is flagged for negative treatment, the affected cell or cells must be examined for changes in analysis. This citation-checking process using Drafting Assistant ensures that the analysis stays up to date.247

245 See infra Appendix A, Item 8.
247 To recap the ten steps in site maintenance: (1) Search the site for citations of law or procedure of any type; (2) Place the cites into an Excel spreadsheet alongside their corresponding cell; (3) Transfer the Excel citation data to a Word doc; (4) Upload the Word doc to Westlaw Drafting Assistant; (5) Create a new profile using WestCheck to allow WestCheck to extract the cites; (6) Use the Generate Report feature of WestCheck to obtain the current treatment of each case and a link to the full case, statute or rule; (7) Compare flagged cites to the Excel spreadsheet to identify any affected cells; (8) Update each cell as needed to keep the analysis in the decision tree current by adding, deleting or modifying existing entries; (9) Add new citations to the Excel spreadsheet; (10) Repeat the steps 3–9 in the process on a regular basis to ensure currency of the site.
This system of checking and maintaining the currency and accuracy of the law is supplemented by faculty assigned to monitor the decision tree. This precaution is essential to prevent a statute or case that changes the analysis from escaping notice. For example, a state’s law may be superseded by the effect of a federal statute, regulation, or case that preempts state law in that subject area without specific reference to the law of the particular state law embedded in the decision tree.

CONCLUSION

The author’s thesis is that the use of decision trees, like other modern technologies, can be used in the clinical setting to enhance the teaching of analytical skills through a hands-on approach that allows users to visualize the questions, the potential responses, and the citations of legal authority in a logical sequence. Adapting new technologies to the practice of law to improve the practice of law and better serve clients is a time-honored tradition. Introducing students to the latest technology in the clinical setting, and instructing students on its use as an analytical tool is both practical and prudent.

The Socratic method, as incorporated into Langdell’s case method, elicits generative answers and fosters an open-ended discussion of the issues in each case. Langdell’s questions drove the discourse in a manner intended to illuminate the students on the principles of law and the underlying logic. This teaching style, considered so controversial at the time, called on students to defend the positions of the litigants and jurists based on the text and their own reasoning skills.

In other words, while the review of appellate cases provided the platform for class discussion, Langdell’s use of the case method with Socratic questioning demanded rigor in the development of his students’ analytical skills. The use of the decision tree in the clinical setting offers students the opportunity to test their analytical skills in a new and different way using technology unimaginable to Langdell. Consider the

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value of a tree designed by Langdell that reveals his questions and sequencing in legal analysis. It is a diagnostic tool, accessible to students and practitioners.

Clinical faculty, clinical students and their clients benefit from the use of a human-generated decision tree that presents a hierarchy of questions to guide the user towards an optimal recommendation regarding whether to file Chapter 7 consumer bankruptcy and potentially recommendations regarding a variety of other issues. The uses and benefits of decision trees in the clinical setting include protection of clients from injury through professional error, indoctrination of attorneys regarding critical issues in legal analysis, assistance of clinical faculty in supervision, improvement of risk management, promotion of access to justice, fostering judicial economy, and helping to rehabilitate and reclaim the professional image of lawyers. The design of the prototype includes the questions to be posed, the universe of responses, and hypertext links to the legal authority that prompts the need for the question. The user’s ability to analyze an issue is confirmed or corrected by the decision tree, and simultaneously teaches the student and protects the client.

Like Langdell’s Case Method and other law teaching methods, this new teaching method may be controversial. However, as legal education embraces new technologies, decision trees help clinical students test their analytical skills with reduced risk to their clients, and familiarize students with the “benefits and risks associated with relevant technology” that can improve their knowledge and skill.249 To the extent that the decision trees help students learn to “think like a lawyer” and better represent clients, I suspect Professor Langdell would be pleased.

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249 Model Rules of Prof’l Conduct r. 1.1 cmt. 8. (Am. Bar Ass’n 2015).
APPENDIX A.

1. Disclaimer Example:

**DISCLOSURE:**
The University of Arkansas Legal Clinic publishes this On-Line Decision Tree for educational and informational purposes only. The Clinic uses reasonable care in publishing this On-Line Decision Tree. While the information on this site is about legal issues, it is not legal advice or representation. Nothing transmitted to or from this website constitutes the establishment of an attorney-client relationship between you or any attorney. Due to the rapidly changing nature of the law and our reliance on outside sources, we make no warranty or guarantee of the accuracy or reliability for any information, advice, or services provided by any site to which we link. Inclusion of a link should not be construed as an endorsement or recommendation by the University of Arkansas Legal Clinic.

Click ‘Next’ to acknowledge this disclosure.
2. Front Page and Other Considerations:

Welcome to Learn!

The purpose of this program is designed to provide you with information necessary to make filing decisions on behalf of your client. Although this program is not intended to be an exhaustive examination of the Bankruptcy Code, the goal is to guide you through common sections of the Code that will help inform your client’s filing decision. There are, however, a few sections which will guide you through some of the more quirky elements of filing Bankruptcy that are not directly contained within the Code.

The main focus of this program is Chapter 7 consumer bankruptcy.

This program contains four main sections: Filing Eligibility, Exemptions, Dischargeability, and the Privilege Against Self-Incrimination. The Filing Eligibility section will help you to determine your client’s filing eligibility status. The Exemption section will help you to determine which assets your client may wish to exempt from dissolution during a bankruptcy proceeding. The Dischargeability section will help you to determine which debts your client may be able to discharge as a result of the proceeding. The Privilege Against Self-Incrimination section deals with the privilege against self-incrimination in bankruptcy proceedings.

FILING ELIGIBILITY
EXEMPTIONS
DISCHARGEABILITY
PRIVILEGE AGAINST SELF-INCrimINATION
3. Asking the Right Questions:

CELL1

Does the client have a United States
- Residency,
- Domicile,
- Ownership Interest in Property, or
- Place of Business?

YES
NO

11 U.S.C. § 109(d)

CELL1venue

Was the residence, domicile, ownership interest in property, or place of business in the state where the client would like to file for a larger portion of the past 180 days than it was in any other state?

YES
NO

28 U.S.C. § 1409
4. Exploring the Universe of Correct Answers:

CELL 10

Your client is entitled to the protections of the 5th Amendment in bankruptcy proceedings. The 5th may be invoked if your client reasonably believes that disclosure of the information, whether oral testimony or document production, will lead to criminal prosecution. It is especially important to be aware of the right against self-incrimination in bankruptcy proceedings because a client waives their 5th Amendment rights even by accident, and even if the waiver is not knowing and intelligent.

The following proceedings are those in which to be aware of your client's 5th Amendment rights:

- Filing Schedules
- Hearings with Oral Testimony
- Parallel Proceedings

11 USC § 344


CELL10_ORAL TESTIMONY

Has your client previously testified in an oral proceeding in relation to this case or a parallel proceeding?

YES

NO

11 USC § 344


In re A & L Oil Co., 200 B.R. 21, 27 (Bankr. D.N.J. 1996);

In re Cotillion Invs., Inc., 343 B.R. 344, 351-52 (Bankr. S.D. Fla. 2006);

5. Pinpointing Legal Authority:

Who May Be A Debtor, Question 1:
Does the client have a United States

- Residence,
- Domicile,
- Ownership Interest in Property, or
- Place of Business?

YES
NO

11 U.S.C. § 109(a)
6. Sequencing the Questions:

Dischargeability Disclosure

Before proceeding to Dischargeability, please ensure that you have fully examined your client’s filing eligibility status and exemptions. The preceding sections impacts the potential Dischargeability of your client’s debts. If you have already completed both Filing Eligibility and Exemptions, please click Next to continue. Click Filing Eligibility or Exemptions to return to those sections.

EXEMPTIONS
FILING ELIGIBILITY
NEXT
7. Defining, Highlighting and Linking the Terms of Art:

**CELD18_Domestic Support Obligations**

Under Chapter 7, domestic support obligations and property settlements are not subject to discharge under 11 USC § 523(a)(5), however, property settlements may be dischargeable under a Chapter 13 filing.

11 USC § 523(a)(5); CONSUMER BANKRUPTCY LAW AND PRACTICE, (National Consumer Law Center, 5th Ed. 1996) (H. Sommer, ed.).

Back to: EXCEPTIONS TO DISCHARGE

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**DOMESTIC SUPPORT OBLIGATION**

**Definition:**

As defined by 11 U.S.C.A. § 101(44A), the term “domestic support obligation” means a debt that accrues before, on, or after the date of the order for relief in a case under this title, including interest that accrues on that debt as provided under applicable nonbankruptcy law notwithstanding any other provision of this title, that is—

(A) owed to or recoverable by—

(i) a spouse, former spouse, or child of the debtor or such child’s parent, legal guardian, or responsible relative; or

(ii) a governmental unit;

(B) in the nature of alimony, maintenance, or support (including assistance provided by a governmental unit) of such spouse, former spouse, or child of the debtor or such child’s parent, without regard to whether such debt is expressly so designated;

(C) in the nature of alimony, maintenance, or support (including assistance provided by a governmental unit) of such spouse, former spouse, or child of the debtor or such child’s parent, without regard to whether such debt is expressly so designated;

(D) an order of a court of record; or

(E) a determination made in accordance with applicable nonbankruptcy law by a governmental unit; and

(F) not assigned to a nongovernmental entity, unless that obligation is assigned voluntarily by the spouse, former spouse, child of the debtor, or such child’s parent, legal guardian, or responsible relative for the purpose of collecting the debt.
8. Research Prompts:

**CELL16_SCHERES**

If your client owns title to the property which is the subject of the potentially incriminating document request, there is a circuit split on the additional requirements your client must satisfy in order to claim her 5th Amendment right.

The 9th Circuit holds that possession of the potentially incriminating documents is enough to allow your client to invoke her 5th Amendment rights.

The 2nd Circuit says that your client must not only possess the documents, but must own title to the property in question, and demonstrate the incriminating nature of the documents.

Please check your jurisdiction to see which rule your court will follow.

11 USC § 344


United States v. Cohen, 386 F.2d 464, 468 (9th Cir. 1967);

United States v. Fallley, 489 F.2d 33, 41 (2d Cir. 1973);

In re Kanter, 117 F. 356, 357 (S.D.N.Y. 1902);

Ensign v. Pennsylvania, 227 U.S. 592, 599 (1913);

Czarlinsky v. United States, 54 F.2d 889, 893 (10th Cir. 1931)

Back to Incrimination Overview
APPENDIX B.

1. Search the site for citations of law or procedure of any type

2. Place the cites into an Excel spreadsheet alongside their corresponding cell

| 11 USC § 523(a)(16) | CellID53
| 11 USC § 523(a)(17) | CellID58
| 11 USC § 523(a)(18) | CellID59
| 11 USC § 523(a)(19) | CellID60
| 11 USC § 541 | defiState
| 11 USC § 741-753 | Special Ch7
| 11 USC § 761-767 | SpecialCh7
| 11 USC § 761 | Definitions
| 11 USC § 727 | cellDischargeability
| 11 USC § 727(a)(1) | CellG0
|  | CellG1 |
3. Transfer the Excel citation data to a Word Document

<table>
<thead>
<tr>
<th>Section</th>
<th>Citation</th>
<th>Section</th>
<th>Citation</th>
<th>Section</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 USC § 522(a)</td>
<td>11 USC § 523(a)</td>
<td>11 USC § 707(b)(7)</td>
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4. Upload the Word Document to Westlaw Drafting Assistant
5. Create a new profile using WestCheck to allow WestCheck to extract the list of cites
COMBATING PROFESSIONAL ERROR

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[Image of a software interface with a list of statutes]

- 11 USC § 522(q)
- 11 USC 101
- 11 USC § 109(g)
- 11 USC § 109(a)
- 11 USC § 109(b)
- 11 USC § 109(c)
- 11 USC § 109(d)
- 11 USC § 109(e)
- 11 USC § 109(f)
- 11 USC § 109(g)
- 11 USC § 109(h)
- 11 USC § 111
- 11 USC § 302
- 11 USC § 303
- 11 USC § 322
- 11 USC § 507(a)
- 11 USC § 522(b)
- 11 USC § 522(d)
COMBATING PROFESSIONAL ERROR

Select Profile  Edit  Create New
For DT Appendix
Jurisdiction: None

Extract Citation List  Cancel

11 USC § 522(q)
11 USC 101
11 USC § 109(g)
11 USC § 109(a)
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11 USC § 109(d)
11 USC § 109(e)
11 USC § 109(f)
11 USC § 109(g)
11 USC § 109(h)
11 USC § 111
11 USC § 302
11 USC § 303
11 USC § 322
11 USC § 507(a)
11 USC § 522(b)
11 USC § 522(c)
11 USC § 522(d)
11 USC § 522(e)
11 USC § 522(f)
6. Use the Generate Report feature of WestCheck to obtain the current treatment of each case and a link to the full case, statute, or rule.
2017] COMBATING PROFESSIONAL ERROR

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Report Settings
Number of citations to be processed: 72

Delivery Options:
- Email
- Download
- Online Report Display

Result Options:
Full Text
- Deliver Full Text results separately from the report.
- Substitute with Reporter Images when available
- Dual Column Layout for Cases
- Deliver footnotes inline
- Include West Headnotes

Note: Footnote and Headnote delivery

Generate Report

Cancel
7. Compare flagged cites to the Excel spreadsheet to identify any affected cells

8. Update each cell as needed to keep the analysis in the decision tree current by adding, deleting or modifying existing entries

9. Add new citations to the Excel spreadsheet

10. Repeat the Steps 3–9 in the process on a regular basis to ensure currency of the site

### SUMMARY

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C. 5. 111. Joint cases.

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C. 6. 3. 112. Insolvency cases.

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C. 7. 322. Qualification of trustee.

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