BEST PRACTICES FOR THE LAW OF THE HORSE: TEACHING CYBERLAW AND ILLUMINATING LAW THROUGH ONLINE SIMULATIONS

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Abstract

In an influential 1996 article entitled Cyberspace and the Law of the Horse, *Judge Frank Easterbrook mocked cyberlaw as a subject lacking in cohesion and therefore unworthy of inclusion in the law school curriculum. Responses to Easterbrook, most notably that of Lawrence Lessig in his 1999 article* The Law of the Horse: What Cyberlaw Might Teach, *have taken a theoretical approach. However, this Article—also appropriating the "Law of the Horse" moniker—concludes that Easterbrook's challenge is primarily pedagogical, requiring a response keyed to whether cyberlaw ought to be taught in law schools. The Article concludes that despite Easterbrook's concerns, cyberlaw presents a unique opportunity for legal educators to provide capstone learning experiences through role-playing simulations that unfold on the live Internet. In fact, cyberlaw is a subject particularly well-suited to learning through techniques that immerse students in the very technologies and networks that they are studying. In light of recommendations for educational reform contained in the recent studies* Best Practices for Legal Education *and the* Carnegie Report, *the Article examines the extent to which*

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"Cybersimulations" are an ideal way for students to learn—in a holistic and immersive manner—legal doctrine, underlying theory, lawyering skills, and professional values. The Article further explains how the simulations were developed and provides guidance on how they can be created by others. The Article concludes with a direct response to Easterbrook, arguing that cyberlaw can indeed "illuminate" the entire law.

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I. INTRODUCTION

The concept of a "law of the Internet" has been attacked, most notably by Judge Frank Easterbrook, as a conceptually incoherent and unworthy addition to the law-school curriculum.[1] This Article provides a pedagogical—and therefore unique—response to Easterbrook's attack. It concludes that cyberlaw provides an exceptional opportunity for teacher-scholars interested in experimenting with unconventional approaches to legal education. The approach taken by the author involved staging fictional but otherwise live on-line simulations where students engaged in role-plays as lawyers acting on behalf of fictional clients against fictional defendants. Although all aspects of the simulations were controlled by the author, the simulations were otherwise realistic, using the live Internet for the parties' sites as well as for enforcement-related correspondence. Such simulations provided law students with a deep understanding of legal doctrines, underlying theory, lawyering skills, and professional values, in ways that would be difficult, if not impossible to achieve using conventional Socratic methods. Such techniques may allow instructors to use cyberlaw—the subject that Easterbrook derided as nothing more than a "Law of the Horse"—to instead "illuminate the entire law."[2]

The Article presents the author's experiences putting into effect skills- and values-based simulations, or "Cybersimulations," as the main focus of his cyberlaw course.[3] It further assesses such

1. *See* Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, 207 (1996). As noted in Part II.A, *infra*, Lawrence Lessig provided the most prominent response to Easterbrook, vigorously defending the subject of cyberlaw as well as the value in teaching the course. *See* Lawrence Lessig, *The Law of the Horse: What Cyberlaw Might Teach*, 113 HARV. L. REV. 501 (1999) [hereinafter Lessig, *Law of the Horse*].

2. *See* Easterbrook, *supra* note 1, at 207.

3. *Cf.* Jay M. Feinman, *Simulations: An Introduction*, 45 J. LEGAL EDUC. 469, 470

simulations in light of the recent 2007 *Carnegie* and *Best Practices for Legal Education* reports, which recommended many reforms to legal education.[4] The Article concludes that the skills- and values-based approach is an extremely effective way of teaching cyberlaw. For example, simulations helped students to understand more deeply matters such as cybersquatting, meta-tag infringement, and intermediary liability. The converse is also true. Simulations provided students with a much richer pedagogical tapestry, permitting them to practice, in the cyberlaw context, lawyering skills such as fact-finding, negotiation, and client management, as well as focusing attention on professional value concerns such as conflict checking and the rights of unrepresented persons.

Part II lays out the "Law of the Horse" problem and its impact on cyberlaw scholarship. It also discusses the surface-level difficulties in defining a "cyberlaw," and how difficult coverage choices prompted the author to develop online role-playing simulations as a teaching method. It also discusses recent calls for reform in legal education.

Part III lays out how to build an immersive Cybersimulation. It considers the need for plot, characters, and props, or "playwriting"; technical requirements such as domain names and other tools, or "stagecraft"; and the benefits of due diligence, "thinvisibility," and disclaimers, or "back-office support."

Part IV describes the simulations in action and assesses their effectiveness. It first addresses the teaching methodology, starting with a "baseline" period of traditional case-method instruction, followed by the Cybersimulations, which essentially consist of extended improvisational role-plays using the live Internet. It then provides details about three cyberlaw projects, namely, cybersquatting, intermediary, and "informational bulletin" projects. Part IV next addresses how this methodology brings theory and doctrine to life by also requiring students to develop a full suite of contextual practice skills as well as to grapple with realistic ethics

(1995); Paul S. Ferber, *Adult Learning Theory and Simulations—Designing Simulations to Educate Lawyers*, 9 CLINICAL L. REV. 417, 418 (2002).

4. ROY STUCKEY ET AL., BEST PRACTICES FOR LEGAL EDUCATION (2007), *available at* http://law.sc.edu/faculty/stuckey/best_practices/best_practices-full.pdf [hereinafter BEST PRACTICES]; WILLIAM M. SULLIVAN ET AL., EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW (2007) [hereinafter CARNEGIE REPORT]; AM. BAR ASS'N, LEGAL EDUCATION AND PROFESSIONAL DEVELOPMENT—AN EDUCATIONAL CONTINUUM (1992) [hereinafter MACCRATE REPORT]. All citations for *Best Practices* are to the 2007 print edition; notably, the pagination of the online 2007 version is different.

dilemmas. Finally, Part IV considers how Cybersimulations provide multiple methods of ongoing, or "formative" assessment, which is far more effective than traditional, end-of-term "summative" assessment.

Finally, Part V provides an assessment of the simulations. It first evaluates them from the perspectives of learning theory, the *Best Practices* report, and the *Carnegie Report*. It concludes by coming full circle, with a response to Judge Easterbrook. Suggesting that Easterbrook fails to look beneath the "surface" of cyberlaw, the Article concludes that cyberlaw, particularly when taught through simulations, provides a unique opportunity for the holistic learning of law through the combined synergies of doctrine, theory, skills, and values. To teach cyberlaw through simulations is to adopt an ideal way to, in Easterbrook's terms, "illuminate the entire law."

II. TEACHING THE LAW OF THE HORSE

In constant flux, cyberlaw is a problematic subject to teach.[5] New issues arise regularly. Case law unfolds constantly, quickly making casebooks obsolete. Accordingly, many professors develop their own course materials.[6] Moreover, cyberlaw may be doctrinally schizophrenic, tying together areas such as tort law, contract law, constitutional law, and more. As one casebook notes: "Is there such a

5. As Eric Goldman notes, "Cyberlaw changes constantly." Eric Goldman, *Teaching Cyberlaw*, 52 ST. LOUIS U. L.J. 749, 755 (2008). Other scholars have written helpful articles on approaches to teaching cyberlaw. *See, e.g.*, Patrick Quirk, *Curriculum Themes: Teaching Global Cyberlaw*, 16 INT'L J.L. & INFO. TECH. 297 (2008). The topic of teaching intellectual property has also prompted thoughtful commentary. *See generally* Symposium, *Teaching Intellectual Property Law*, 52 ST. LOUIS U. L.J. 715 (2008) (symposium issue on teaching intellectual property); *see also* Llewellyn Joseph Gibbons, *Teaching Intellectual Property Licensing Transactionally*, 34 U. TOL. L. REV. 717 (2003). Of direct interest to this Article, Malla Pollack has published a set of materials relevant to teaching intellectual property using skills. *See* Malla Pollack, *Teaching Intellectual Property as a Skills Course*, 1 AM. JUSTICE L. REV. 801 (2008). Pollack correctly points out that whereas casebook teaching focuses on "cleaning up" a client's mess, skills teaching helps students to "try[] to help clients keep out of court." *Id.* at 801. Regarding simulations, Peter K. Yu simulates the international treaty negotiation process in his course in international intellectual property. *See* Peter K. Yu, *Teaching International Intellectual Property Law*, 52 ST. LOUIS U. L.J. 923, 947 (2008).

6. Some cyberlaw professors post course materials online. In particular, Jessica Litman compiles a list of dozens of law professors who post cyberlaw course materials online. Jessica Litman, *Other Courses and Seminars on Internet Law*, LAW 897: THE LAW IN CYBERSPACE, http://www-personal.umich.edu/~jdlitman/classes/cyber/courses.html (last updated Sept. 26, 2010). Partially due to the short shelf-life of casebooks, Eric Goldman also prepares and updates his own cyberlaw reader. *See* Goldman, *supra* note 5, at 759-60; *Cyberlaw/Internet Law*, ERIC GOLDMAN, http://ericgoldman.org/cyberlaw.html (last visited Apr. 12, 2012) (listing course materials from 1996 and later). Others combine a casebook with supplemental materials. The author takes the latter approach, and uses the Ku and Lipton casebook, RAYMOND S. R. KU & JACQUELINE LIPTON, CYBERSPACE LAW: CASES AND MATERIALS (3d ed. 2010).

subject as 'Internet and Computer Law'? If so, what should an 'Internet and Computer Law' casebook include? The answers to these questions are not obvious."[7] It is telling that some casebooks organize by doctrinal area,[8] while others organize by theme or metaphor.[9] One casebook uses an "information law" approach, while retaining "Cyberspace Law" in its title.[10] The varying approaches suggest that cyberlaw remains a subject struggling to define and justify itself.

A. The Easterbrook challenge

In a classic exchange, Judge Frank Easterbrook and Professor Lawrence Lessig debated whether cyberlaw was a topic worth teaching. Easterbrook suggested that cyberlaw was no more a discrete topic than the "Law of the Horse," risking a "multidisciplinary dilettantism" ill-suited to legal education.[11] He said:

> Lots of cases deal with sales of horses; others deal with people kicked by horses; still more deal with the licensing and racing of horses, or with the care veterinarians give to horses, or with prizes at horse shows. Any effort to collect these strands into a course on "The Law of the Horse" is doomed to be shallow and to miss unifying principles.[12]

Stating that legal education needs "unifying principles," Easterbrook argued that legal education "should be limited to subjects that could illuminate the entire law."[13] For his part, Lessig agreed with the need for unifying principles, but suggested that the study of cyberlaw permits the exploration of principles that shed light on the law, namely, the "modalities of regulation": law, norms, markets, and architecture (in the context of computers and networks, the latter also being "code").[14] Law was just one way that primary conduct is

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7. PETER B. MAGGS ET AL., INTERNET AND COMPUTER LAW: CASES — COMMENTS — QUESTIONS iii (2d ed. 2005).

8. *See, e.g.*, KU & LIPTON, *supra* note 6, at xi-xvii (organizing by doctrinal areas); MARK A. LEMLEY ET AL., SOFTWARE AND INTERNET LAW ix (3d ed. 2006) (same); MAGGS ET AL., *supra* note 7, at vii-ix (same); MARGARET JANE RADIN ET AL., INTERNET COMMERCE: THE EMERGING LEGAL FRAMEWORK xi-xiii (2d ed. 2006) (same).

9. *See, e.g.*, PATRICIA L. BELLIA ET AL., CYBERLAW: PROBLEMS OF POLICY AND JURISPRUDENCE IN THE INFORMATION AGE vii-viii (3d ed. 2007).

10. *See* KU & LIPTON, *supra* note 6.

11. Easterbrook, *supra* note 1, at 207.

12. *Id.*

13. *Id.*

14. *See* LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 86-90 (1999); Lawrence Lessig, *The New Chicago School*, 27 J. LEGAL STUD. 661, 662-64 (1998). Lessig has also released an updated version of *Code*. *See* LAWRENCE LESSIG, CODE: VERSION 2.0 (2006).

regulated and social values protected. The "code" of computers and cyberspace provided another. Thus, argued Lessig:

> The threats to values implicit in the law—threats raised by changes in the architecture of code—are just particular examples of a more general point: that more than law alone enables legal values, and law alone cannot guarantee them. If our objective is a world constituted by these values, then it is as much these other regulators—code, but also norms and the market—that must be addressed. Cyberspace makes plain not just how this interaction takes place, but also the urgency of understanding how to affect it.[15]

This debate is so foundational to cyberlaw that a number of casebooks start with excerpts from one or both articles.[16] Other commentators have responded to Easterbrook, debating whether cyberlaw provides a cohesive topic of study.[17] Some have suggested that cyberspace is nothing more than "old wine in new bottles," and others have suggested that it merits a regulatory scheme separate from the brick-and-mortar world.[18] The debate between those who think

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15. Lessig, *Law of the Horse*, *supra* note 1, at 548-49.

16. *See, e.g.*, BELLIA ET AL., *supra* note 9, at 2-10 (excerpting both); KU & LIPTON, *supra* note 6, at 5-12 (same).

17. Jacqueline Lipton notes that "There is clearly no consensus as to the subject matter or appropriate framework for cyberlaw as a cohesive academic field." Jacqueline Lipton, *A Framework for Information Law and Policy*, 82 OR. L. REV. 695, 699 (2003); *cf.* Viktor Mayer-Schönberger, *The Shape of Governance: Analyzing the World of Internet Regulation*, 43 VA. J. INT'L L. 605, 606 n.1 (2003) ("no unanimity" on definition of "cyberlaw"). Suggesting that information law may provide a more useful framework, Lipton suggests that over-focus on cyberlaw "may have adversely impacted on the development of a body of information law principles." Lipton, *supra*, at 696. A. Michael Froomkin suggests that "most of what currently passes for Internet Law will become sub-fields of other subjects—eventually." A. Michael Froomkin, *The Empire Strikes Back*, 73 CHI.-KENT L. REV. 1101, 1101 n.1 (1998). Joseph H. Sommer argues that there is no such thing as cyberlaw and that it is dangerous to pretend such a thing exists. *See* Joseph H. Sommer, *Against Cyberlaw*, 15 BERKELEY TECH. L.J. 1145, 1147-48 (2000). Timothy Wu concludes that despite Easterbrook's criticisms, the "big picture is sometimes worth thinking about." Timothy Wu, *Application-Centered Internet Analysis*, 85 VA. L. REV. 1163, 1183 (1999). Raymond Ku similarly notes that cyberlaw "forces us to examine our pre-cyberworld rules as well as our commitment to the values that form the foundation for those laws." Raymond Ku, *Foreword: A Brave New Cyberworld?*, 22 T. JEFFERSON L. REV. 125, 129 (2000) [hereinafter Ku, *Foreword*]. Ku further notes the value of allowing students to explore, as part of their cyberlaw studies, whether cyberlaw itself is a coherent subject. *See* Raymond Shih Ray Ku, *The Internet Revolution*, 20 SANTA CLARA COMPUTER & HIGH TECH. L.J. 205, 211 (2003).

18. In an article on Internet jurisdiction, Martin Redish uses the converse metaphor, saying the Supreme Court's jurisdiction cases are "placing new wine in old bottles." Martin H. Redish, *Of New Wine and Old Bottles: Personal Jurisdiction, the Internet, and the Nature of Constitutional Evolution*, 38 JURIMETRICS 575, 577 (1998) (discussing Hess v. Pawloski, 274 U.S. 352 (1927)).

that cyberspace should be regulated no differently from the real world (the "unexceptionalists"), and those who argue that cyberspace merits a separate regime of regulation (the "exceptionalists"), has raged on ever since.[19]

This Article does not seek to resolve the exceptionalist debate. Instead, it suggests that even if a cohesive "cyberlaw" does not exist on the level of doctrine or theory, its value for exploring possible theories, and more fundamentally, lawyering skills and professional values, makes it ideal for the law school curriculum.[20] Although Easterbrook's challenge has prompted numerous theoretical responses, those responses are in a sense misguided: Easterbrook's challenge is not primarily theoretical, but pedagogical. As such, it demands a pedagogical response.

Put differently, Easterbrook makes two distinct, but intertwined, claims. The first is essentially descriptive: there *is no cyberlaw* because it is not sufficiently cohesive. This is a *descriptive*, or as described here, "surface" attack on cyberlaw. Easterbrook's second attack is essentially normative: only cohesive subjects that can "illuminate the entire law" should be taught in law schools.[21] By this

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19. Easterbrook's attack on cyberlaw is foundational to the literature, directly or indirectly prompting numerous scholars to respond with theoretical frameworks. *See* Lessig, *Law of the Horse*, *supra* note 1; *see also, e.g.*, Goldman, *supra* note 5, at 750; Orin S. Kerr, *The Problem of Perspective in Internet Law*, 91 GEO. L.J. 357, 380 (2003); Lipton, *supra* note 17; Renato Mariotti, *Cyberspace in Three Dimensions*, 55 SYRACUSE L. REV. 251, 264 (2004-2005); Schönberger, *supra* note 17, at 607-08. The theoretical debates also led to the "exceptionalist/unexceptionalist" split noted above:

> Easterbrook's critique and responses to it effectively divided early legal scholarship regarding online communication into two camps. On one side were the cyberspace "unexceptionalists" who argued in various contexts that the online medium did not significantly alter the legal framework to be applied . . . . On the other, cyberspace "exceptionalists" argued that the medium itself created radically new problems requiring new analytical work to be done . . . .

Introduction to LAW AND SOCIETY APPROACHES TO CYBERSPACE xi, xiv (Paul Schiff Berman ed. 2007); *see generally* DAVID G. POST, IN SEARCH OF JEFFERSON'S MOOSE: NOTES ON THE STATE OF CYBERSPACE (2009). The discussion continues. *See, e.g.*, Eric Goldman, *The Third Wave of Internet Exceptionalism*, *in* NEXT DIGITAL DECADE: ESSAYS ON THE FUTURE OF THE INTERNET 165, 165 (Berin Szoka & Adam Marcus eds., 2010); Tim Wu, *Is Internet Exceptionalism Dead?*, *in* NEXT DIGITAL DECADE: ESSAYS ON THE FUTURE OF THE INTERNET, *supra*, at 179.

20. Eric Goldman notes varied approaches to teaching cyberlaw, such as surveys, clinics, technology-in-practice, and courses focused on free speech, intellectual property, e-commerce, computer crimes, and computer law. *See* Goldman, *supra* note 5, at 751-52. Goldman favors the survey approach for its positive spillovers of helping students to think "horizontally." *Id.* at 752-53. The skills approach, I believe, provides similar benefits by helping students to develop lawyering skills that may be useful beyond the borders of cyberlaw. It also helps students to come away with deeper understandings of the material, "illuminating" more than just cyberlaw.

21. *See* Easterbrook, *supra* note 1, at 207.

understanding of Easterbrook, cyberlaw lacks cohesiveness and therefore *should not be taught* in law schools. This is a *normative*, or as phrased herein, "illuminate" attack. The terms "surface" and "illuminate" are used to evoke the phraseology of Easterbrook's dual attacks, i.e., that cyberlaw is "shallow" and thus limited to the "surface," and that proper subjects "illuminate" the entire law.

This Article rejects Easterbrook's phrasing of the first, descriptive issue as well as his second, normative conclusion. Indeed, Easterbrook's second claim does not necessarily flow from the first. Thus, even if it is not possible to develop a cohesive theoretical foundation for cyberlaw, it still ought to be taught. Others appear to agree. For example, Jacqueline Lipton, who suggests that the term "cyberlaw" should be avoided, is nonetheless a co-author of one of the leading casebooks on the subject,[22] underscoring the utility of the subject in today's schools. Similarly, Eric Goldman notes that cyberlaw courses help students to "deepen their understanding of the law" by providing "new insights" into "basic legal principles."[23] Moreover, even if Easterbrook's descriptive "there is no cyberlaw" attack were true in 1996, subsequent regulatory responses to the Internet have since led to a new body of cyberspace-specific laws and procedures, very much deserving of study in a topical course.[24] Even general practitioners can expect to have cyberlaw issues come across their desks.[25] Finally, a cyberlaw course permits students to engage in a useful case study of how law develops quickly in response to "rapidly evolving technology and business/social practices."[26]

This Article will return to Easterbrook's dual attacks on cyberlaw in Part V.B. In the meantime, the Article will accept for argument's sake his surface attack, and proceed from the assumption that Easterbrook may be correct. Thus, the focus of the sections between now and Part V.B will instead focus on whether cyberlaw is worth teaching, and the extent to which the Article's "Cybersimulations" approach may be an ideal way to teach cyberlaw. Afterwards, we will return to Easterbrook.

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22. KU & LIPTON, *supra* note 6; Lipton, *supra* note 17, at 696. As additional evidence of the murkiness of cyberlaw as a subject, Lipton points to the huge differences in coverage and organization amongst leading cyberlaw texts and treatises. *See* Lipton, *supra* note 17, at 698-99.

23. Goldman, *supra* note 5, at 750.

24. *See id.*

25. *Id.*

26. *Id.*

B. The Coverage Dilemma

The difficulties in defining cyberlaw remain tremendously important in this Article, but more in the context of addressing how the course might be taught, and why those difficulties prompted a simulations approach. The first time I taught cyberlaw as a three-hour doctrinal course,[27] I faced an "as-applied" version of Easterbrook's attack on cyberlaw's cohesion: what should I cover, how much, and how?[28] Thus, my concern—though related to the definitional question of what *is* cyberlaw—was more practically focused on *how* to teach cyberlaw. As Easterbrook hints, "cyberlaw" subsumes a huge number of seemingly unrelated topics, such as free speech, anonymity, defamation, intellectual property, contracting, privacy, and more.[29] Many of these topics are worthy of, and oftentimes receive detailed treatment in, separate courses.[30] Developing a cyberlaw syllabus is therefore a series of Hobson's choices: one can choose comprehensiveness or detail, but not both.[31] One should also choose, as Easterbrook suggests, unifying principles that tie together

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27. The year before, I taught cyberlaw as a two-credit seminar, where I faced the same quandaries. How can one cover a huge subject in only two credits? I chose to structure the course as a writing seminar with a focus on selected cyberlaw topics, using a book by Professors Fajans & Falk on scholarly writing along with assignments to cases, law review articles, and other materials. *See* ELIZABETH FAJANS & MARK R. FALK, SCHOLARLY WRITING FOR LAW STUDENTS: SEMINAR PAPERS, LAW REVIEW NOTES AND LAW REVIEW COMPETITION PAPERS (3d ed. 2005).

28. By convention, the first person is typically subordinated in legal scholarship as a rhetorical device in an attempt to create an appearance of objectivity. However, I will not hesitate to use the first person in the main text as appropriate. The Cybersimulations cast me, the professor, as multiple characters in an ongoing, oftentimes improvisational role-play, making it appropriate to use the first person at times to narrate the construction of the role-playing "stage," as well as the unfolding of the learning "production." *Cf.* Amy D. Ronner, *The Learned-Helpless Lawyer: Clinical Legal Education and Therapeutic Jurisprudence as Antidotes to Bartleby Syndrome*, 24 TOURO L. REV. 601, 671-72 (2008) ("Because, as others have discovered, narratives are powerful and also compatible with clinics, I will rely on story telling to show how, in the context of working on this appeal, student lawyers united and essentially built their own firm . . . ." (footnote omitted)); *see also* Nancy Levit, *The Theory and the Practice—Reflective Writing Across the Curriculum*, 15 J. LEGAL WRITING INST. 253, 255 (2009) (noting that "storytelling has become firmly entrenched not only in jurisprudence, but, more fundamentally in the ways we think about teaching and practicing law").

29. By way of example, Ku & Lipton's casebook includes sections on speech, intellectual property, privacy, network ownership/access, and more. *See* KU & LIPTON, *supra* note 6, at ix.

30. Of course, such a quandary is not unique to cyberlaw. I also teach Civil Procedure, a course that is notoriously difficult to structure. For example, does one start with jurisdiction and later teach the Federal Rules, or does one start with the Rules? Casebooks take a variety of approaches. Just as with cyberlaw, there is no perfect or indisputably correct approach.

31. *See* Goldman, *supra* note 5, at 754-55 (noting trade-offs in course organization and emphasis).

otherwise disparate topics.[32]

Like many professors teaching a doctrinal subject for the first time, I scanned the syllabi of more experienced professors for ideas.[33] Ultimately, I reached the conclusion that it was impossible to cover every aspect of cyberlaw in depth, and that I would have to pick and choose. One possibility was to cover only a few topics in depth. Another possibility was to give many topics a cursory treatment. Both choices were, of course, unsatisfying, and in the end, I chose to cover some topics in depth at the expense of others.

Around the same time, my St. Thomas Law colleagues and I began to consider the extent to which students might benefit from the skills-and-values reforms advocated in the *Carnegie Report* and *Best Practices*.[34] Like most law schools, we already offered a variety of doctrinal, seminar, and clinical courses, as well as writing courses, internships, and externships. Of those, clinics, writing courses, and internships/externships were the main courses with dedicated skills components.[35] Regarding doctrinal courses, the presence of skills components varied. Some professors included skills components in their courses, but often as sidebars.[36] Others included skills in a more formalized manner. Most notably, my colleague Leonard Pertnoy, who has long advocated skills teaching,[37] showed me the realistic but simulated litigation materials he used, along with the case files that students assembled in response. To say that Pertnoy's practicum was a large influence on my development of cyberlaw simulations would be an understatement.[38]

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32. *See* BELLIA ET AL., *supra* note 9, at 1 (stating that cyberlaw "is a lens through which broader conceptual debates can be re-examined, challenged, and potentially reconceived"); LEMLEY ET AL., *supra* note 8, at xxi (stating that software and Internet law often require "integrative thinking").

33. Of course, I am by far not the first to consider how cyberlaw should be taught. *See supra* notes 5 and 17 (listing authorities).

34. *See* CARNEGIE REPORT, *supra* note 4; BEST PRACTICES, *supra* note 4.

35. For example, St. Thomas Law offers clinics in appellate litigation, immigration, and tax law. Internships and/or externships include work at the Florida Supreme Court, a Pax Romana internship at the United Nations, and various externships in civil practice, criminal practice, and elder law. There are also courses in appellate advocacy, trial advocacy, as well as moot court and mock trial teams.

36. For example, I have always included a set of lawyering skills in my intellectual property survey course. I have had students run basic trademark searches, prepare mock copyright registration applications, and read patents. But such assignments were not typically graded, and ultimately, students were evaluated in the traditional manner: by a summative examination at the close of the course.

37. *See generally* Leonard D. Pertnoy, *Skills is not a Dirty Word*, 59 MO. L. REV. 169 (1994).

38. Beyond Professor Pertnoy and me, a number of my doctrinal St. Thomas Law

C. *Calls for Reform in Legal Education*

Calls for reform in legal education are nothing new, and criticisms of the case method date back to its inception in the 1870s.[39] In contrast, medical schools, spurred by a Carnegie Foundation report from 1910, have long incorporated clinical training into medical education.[40] A century later, times are finally changing for law schools as well. As of this writing, the ABA is considering mandating outcome-based education in American law schools, making skills and values a key part of legal education. In particular, Proposed Standard 304 would require all upper-level law students to receive at least three semester hours of integrated training in "doctrine, theory, skills and legal ethics" via one or more clinics, field placements, or *simulation courses*.[41] When—and not if—the proposals take effect, many schools will need to expand their skills offerings. Because live-client clinics can be expensive, and because externships may be limited by local market conditions, schools will likely expand their simulations

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colleagues have experimented with more formal incorporation of skills in the classroom. In the 2008-2009 academic year, a number of my colleagues spent significant time developing skills exercises for first-year courses. During the 2009-2010 school year, many others developed skills practica for both first-year and upper-level classes.

39. Langdell's Harvard Contracts class did not react positively to his introduction of the case method. *See* Ira Steven Nathenson, *Navigating the Uncharted Waters of Teaching Law with Online Simulations*, 38 OHIO N.U. L. REV. (forthcoming 2012) [hereinafter Nathenson, *Uncharted Waters*], *available at* http://ssrn.com/abstract=1944664. In 1914, Josef Redlich wrote a report for the Carnegie Foundation in which he generally praised the case method, but still noted the importance of moot courts (i.e., skills training) as a supplement. *See* JOSEPH REDLICH, THE COMMON LAW AND THE CASE METHOD IN AMERICAN UNIVERSITY LAW SCHOOLS: A REPORT TO THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING 30-31 (1914); *see also* James R. Maxeiner, *Educating Lawyers Now and Then: Two Carnegie Critiques of the Common Law and the Case Method*, 35 INT'L J. LEGAL INFO. 1 (2007) (drawing parallels between Redlich's report and the current call for legal education reforms). In the 1920s, Alfred Reed wrote a report bemoaning the lack of practical training in university-based law schools, but was ignored. *See* ALFRED Z. REED, TRAINING FOR THE PUBLIC PROFESSION OF THE LAW 281 (1921); DAVID I. C. THOMSON, LAW SCHOOL 2.0: LEGAL EDUCATION FOR A DIGITAL AGE 59-72 (2009). In the late 1970s, Roger Cramton wrote a report for the ABA Section of Legal Education, including recommendations regarding practice skills. *See* ABA TASK FORCE ON LAWYER COMPETENCY, REPORT AND RECOMMENDATIONS: THE ROLE OF LAW SCHOOLS (1979). Although the report was followed by an increase in clinical offerings, "little else changed." THOMSON, *supra*, at 62; *see also* Edward Rubin, *What's Wrong with Langdell's Method, and What to Do About It*, 60 VAND. L. REV. 609 (2007).

40. Abraham Flexner's 1910 report to the Carnegie Foundation on medical education was highly influential in the expansion of clinical education in medical schools. *See* ABRAHAM FLEXNER, MEDICAL EDUCATION IN THE UNITED STATES AND CANADA: A REPORT TO THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING (1910); THOMSON, *supra* note 39, at 60.

41. AM. BAR ASS'N, SECT. OF LEGAL EDUC. AND ADMISS. TO THE BAR, STANDARDS REV. COMM., PROPOSED STANDARD 304(a)(3) (draft after meeting of Nov. 2011).

offerings.[42] A core thesis of this Article is that simulations provide an ideal platform from which to stage the holistic learning of doctrine, theory, values, and skills. Moreover, cyberlaw simulations—which use the tools that are the focus of both cyberlaw and of Millennial students' daily lives—may permit such learning in capstone form.

1. *MacCrate Report*

In 1992, the ABA Section of Legal Education and Admissions to the Bar issued the influential *MacCrate Report*.[43] The report recommended better incorporation of skills and values into the law school curriculum, including "revisions of conventional courses and teaching methods to more systematically integrate the study of skills and values with the study of substantive law and theory."[44] This suggestion rings strongly with the Cyberskills course, where the simulations were set up to, in terms of the report, "systematically integrate" doctrine, theory, skills, and values.[45] The report includes a detailed statement of "Fundamental Lawyering Skills and Professional Values."[46] The skills are: (1) Problem Solving, (2) Legal Analysis and Reasoning, (3) Legal Research, (4) Factual Investigation, (5) Communication, (6) Counseling, (7) Negotiation, (8) Litigation and Alternative Dispute-Resolution Procedures, (9) Organization and Management of Legal Work, and (10) Recognizing and Resolving Ethical Dilemmas.[47] Notably, whereas skills such as analysis, reasoning, and research are taught pervasively in American law schools, the others are either ignored or left to the peripheries in courses such as negotiation and law office management.[48] The introduction of courses in professional responsibility, though a laudable addition to the curriculum, has done a poor job of integrating ethics into the development of students' professional identities.[49]

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42. "Like externship programs, simulation courses may be less expensive than in-house clinics." Anne L. Spitzer, *Clinical Education in Florida*, 12 NOVA. L. REV. 797, 801 (1988).

43. MACCRATE REPORT, *supra* note 4.

44. *Id.* at 128.

45. *Id.*

46. *Id.* at 135.

47. *Id.* at 138-40.

48. *See* BEST PRACTICES, *supra* note 4, at 180 (simulations courses often include interviewing, counseling, negotiating, law office management, and more); CARNEGIE REPORT, *supra* note 4, at 87 (noting first-year and upper-level lawyering skills courses); *see also* Harold J. Krent & Ronald W. Staudt, *Leadership Opportunities Hiding in Plain View*, 36 U. TOL. L. REV. 111, 114 (2004) (noting how clinical courses can teach "interviewing, fact investigation, counseling, negotiation, pretrial and trial skills").

49. "When legal ethics courses focus exclusively on teaching students what a lawyer can

The *MacCrate* listing is by no means canonical,[50] and also suffers from a degree of overlap.[51] The listing has justly been critiqued on a number of bases.[52] Nevertheless, the *MacCrate* skills were enormously important for the simulations, serving as a guidepost for the practice skills that were incorporated into the cyberlaw class.

2. *Carnegie Report*

In 2007, two major studies recommended reforms to legal education, both with major impacts to the current reform trend. The first is *Educating Lawyers: Preparation for the Profession of Law* (the "*Carnegie Report*") by William M. Sullivan and others for the Carnegie Foundation.[53] Perhaps the key insight of the *Carnegie Report* is its conclusion that legal education should embrace three apprenticeships: cognitive, practical, and formative.[54] Put differently, legal education should better integrate the teaching of law, practice skills, and professional identity.[55] The *Carnegie Report* also noted the value of simulations in law teaching.[56]

The *Carnegie Report* provides further conceptual guidance on what legal education can accomplish through the metaphor of

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and cannot get away with, they can inadvertently convey a sense that knowing this is all there is to ethics." CARNEGIE REPORT, *supra* note 4, at 149; *see also* BEST PRACTICES, *supra* note 4, at 100 ("Law schools do not currently foster professional conduct; just the opposite."). *See* Lauren Solberg, *Reforming the Legal Ethics Curriculum: A Comment on Edward Rubin's "What's Wrong with Langdell's Method and What to do About It,"* 62 VAND. L. REV. EN BANC 12, 13 (2009) (arguing that "legal ethics should be integrated throughout most, if not all, courses in the law school curriculum, and not just confined to one general course on professional responsibility").

50. "The statement is not, and should not be taken to be, a standard for a law school curriculum." MACCRATE REPORT, *supra* note 4, at 131 (emphasis removed). Others have proposed alternative listings of skills. *See, e.g.*, BEST PRACTICES, *supra* note 4, at 51-55, 78 (collecting listings); Jerome Frank, *Why Not a Clinical Lawyer School*, 81 U. PA. L. REV. 907, 918-19 (1933).

51. The "individual skills and values cannot be neatly compartmentalized." MACCRATE REPORT, *supra* note 4, at 136. The report's separate listing of values further overlaps a good deal with Skill #10, including matters such as competence, justice and morality, improving the profession, and professional self-development. *See* MACCRATE REPORT, *supra* note 4, at 140-41.

52. For example, Carrie Menkel-Meadow's critique proposes a framework that looks to competence in a number of broader categories: cognitive, behavioral, affective, normative, and technical. *See* Carrie Menkel-Meadow, *Narrowing the Gap by Narrowing the Field: What's Missing from the MacCrate Report—Of Skills, Legal Science and Being a Human Being*, 69 WASH. L. REV. 593, 615-23 (1994).

53. CARNEGIE REPORT, *supra* note 4.

54. *See id.* at 32-33.

55. *See id.* at 12-14.

56. *Id.* at 158.

"signature pedagogies," which contain far more than just black letter law.[57] According to the report, legal education's signature pedagogy of the case-dialogue method actually consists of four dimensions:

1) *Surface structure*, i.e., what comes out through basic dialogue between teachers and students, which might be characterized as the "holdings" and "black letter" law of each case;

2) *Deep structure*, i.e., the rationale or theory underlying a case or statute that goes deeper than "black letter" law;

3) *Tacit structure*, i.e., the oftentimes hidden and unspoken "values and dispositions" that are contained in legal teaching; and

4) *Shadow structure*, i.e., the oftentimes absent and assumed pedagogy of skills that is oftentimes relegated to clinicians and writing instructors, or worse, left untaught in law schools.[58]

Put differently, integrative legal education ought to intentionally and explicitly tie together four "structures" of professional development: *doctrine* or so-called "black letter" law (the surface structure), the *theory* that forms the foundation of any grouping of materials (the deep structure), the often-ignored and always implied *values* taught or modeled by the instructor (the tacit structure), and the *skills* needed to effect professional mastery (the shadow structure).[59]

As suggested in the *Carnegie Report*, law schools tend to be good at teaching black letter law and to a lesser extent, the theory underlying such law, but do a less-than-stellar job with the values underlying the law.[60] Even worse, outside of clinics and legal writing programs, law schools tend to give little attention to the skills needed

57. *Id.* at 23-24.

58. *See id.* at 24.

59. A signature pedagogy attempts to "build bridges between thought and action, between relative certainty and rampant unpredictability." *Id.* at 23. The concept is an "analogue" to a concept in linguistics: "a distinction between the observable linguistic performance of speakers of a language and the deep structure of grammatical and syntactical knowledge that these speakers are presumed to have in order to be able to speak with competence." *Id.* at 24.

60. *See id.* at 8-9.

by new lawyers.[61] But according to the *Carnegie Report*, law schools must pay attention to all four dimensions of the case method and do a better job of integrating the cognitive, practical, and formative aspects of learning.[62] Finally, legal educators ought to do a better job of balancing "summative" assessment (i.e., the traditional end-of-semester examination) with ongoing "formative" assessment (i.e., assessment given while students still have an opportunity to "course-correct").[63]

3. *Best Practices*

Along similar lines, the *Best Practices* report, commissioned by the Clinical Legal Education Association ("CLEA"), sets forth numerous suggestions for reform, including recommendations for meaningful experiential courses.[64] Although the report's "best practices" are sometimes cast in vague terms,[65] they nevertheless

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61. *See* Brent E. Newton, *Preaching What They Don't Practice: Why Law Faculties' Preoccupation with Impractical Scholarship and Devaluation of Practical Competencies Obstruct Reform in the Legal Academy*, 62 S.C. L. REV. 105, 109 (2010).

62. *See* CARNEGIE REPORT, *supra* note 4, at 24, 28-29.

63. *See id.* at 164; *see also* BEST PRACTICES, *supra* note 4, at 255.

64. BEST PRACTICES, *supra* note 4, at 165-88 (discussing experiential instruction, including simulation-based education).

65. Stanley Fish attacks the term "best practices" as "incredibly obvious and banal." Stanley Fish, *Keep Your Eye on the Small Picture*, CHRON. OF HIGHER EDUC. (Feb. 1, 2002), http://chronicle.com/article/Keep-Your-Eye-on-the-Small/46229 (noting that "in Enron's heyday . . ., many companies looked to [Enron] as a model and no doubt considered its practices to be best"). Ira P. Robbins argues that the *Best Practices* study contains "mostly general, unmeasurable platitudes," using the term "best practices" "to be all things to all people." Ira P. Robbins, *Best Practices on "Best Practices": Legal Education and Beyond*, 16 CLINICAL L. REV. 269, 276 (2009). He argues that "the term 'best practices' denotes those actions that surpass all others in pursuit of an agreed-upon goal or purpose according to some objectively measurable standard." *Id.* at 303. But the use of the term in regards to legal education, says Robbins, "is an unsubstantiated indication of superiority, a prime example of possibly good or better practices masquerading as best practices." *Id.*; *see also generally id.* (echoing Fish).

In response to Fish, the *Best Practices* study concedes that "many of the best practices described in [the report] are banal and obvious," but defends the attempt to describe such practices and to encourage debate. BEST PRACTICES, *supra* note 4, at 11. In response to Robbins, the Chair of the committee that drafted *Best Practices* counters: "Debating the appropriateness of the title of the book and whether law teachers should be discussing 'better' practices instead of 'best' practices is distracting," and "diverts . . . time and attention from working to improve legal education." Roy Stuckey, *"Best Practices" or Not, It is Time to Re-Think Legal Education*, 16 CLINICAL L. REV. 307, 307-08 (2009). Regardless of the terminology, Stuckey argues, law schools share common goals, there is "only one superior method to achieve" their objectives, and they can "objectively verify their success with different and better metrics." *Id.* at 308-09.

My own thinking is in the middle. Although the *Best Practices* study is lengthy and detailed, many of its suggestions are cast in vague terms. Nevertheless, *Best Practices* is an impressive study that provides an important centerpiece for debate on legal education. Even Robbins concedes that *Best Practices* "is an impressive work [and] an invaluable compendium

provide a useful framework for designing a simulations course. The report recommended that educators recognize four basic stages of curriculum development: 1) identifying educational objectives, 2) selecting learning experiences useful in reaching the educational objectives, 3) organizing the learning experiences for effective instruction, and 4) designing methods to evaluate the effectiveness of the learning experiences.[66]

Regarding objectives, educators should clearly articulate their goals and share them with students.[67] The primary goal should be "to develop competence," i.e., "the ability to resolve legal problems effectively and responsibly."[68] In designing curricula, law schools should help students to progressively develop "knowledge, skills, and values."[69] As such, *Best Practices* echoes the *Carnegie Report*'s focus on the co-extant importance of legal knowledge, lawyering skills, and professional values. In addition, law schools should use a variety of teaching methods to achieve educational objectives.[70] Finally, law schools should use better methods to assess learning, as well as to evaluate more broadly the effectiveness of programs of instruction.[71]

Regarding methods used to teach, *Best Practices* discusses a number of approaches.[72] Chapter Six of the report discusses better ways of approaching traditional instruction, such as practices for the case method.[73] Of greater interest to this Article, however, are practices for *experiential* courses. Such courses "rely on experiential education as a significant or primary method of instruction."[74] The

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of thought in legal pedagogy." Robbins, *supra*, at 276. My skepticism over whether there can be a single "right" way of teaching suggests that a more descriptive title for the report might have been, as Robbins and Stuckey imply, "Better Practices." *Id.* at 303; Stuckey, *supra*, at 317. To the extent that the term "best practices" might connote that there is only one "right" way of teaching law, the terminology may make it harder for faculties to reach agreement on curricular reform.

66. BEST PRACTICES, *supra* note 4, at 3.

67. *Id.* at 8.

68. *Id.*

69. *Id.* at 8-9.

70. *Id.* at 9.

71. *Id.*

72. The report discusses seven categories of best practices: "1) setting goals, 2) organizing the program of instruction, 3) delivering instruction, generally, 4) conducting experiential courses, 5) employing non-experiential methods of instruction, 6) assessing student learning, and 7) evaluating the success of the program of instruction." *Id.* at 7.

73. *See id.* at 209-25.

74. *Id.* at 165. Experiential learning is supported by a number of theoretical bases: holistic learning (by engaging multiple senses and engaging differing portions of the brain), Kolb's cyclical model (by a cycle of experience, reflection, conceptualization, experimentation, and repetition of the cycle), and reflection-in-action (knowledge growing from experience and

key to experiential education (as opposed to experiential learning) is that the learning opportunity "consists of a designed, managed, and guided experience."[75] It "integrates theory and practice by combining academic inquiry with actual experience."[76] In such courses, experiential education is not a mere adjunct to Socratic teaching, but rather a significant method of instruction, and a "powerful tool."[77]

Law schools often provide opportunities for experiential education through clinics or externships. But these are not the only methods. An additional and useful tool is the use of simulations.[78] A simulations-based course is one "in which a significant part of the learning relies on students assuming the roles of lawyers and performing law-related tasks in hypothetical situations under supervision and with opportunities for feedback and reflection."[79] Although some simulations are ancillary to traditional methods, other simulations serve as the core pedagogy: "a single, comprehensive simulated scenario that is developed throughout the course."[80]

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reflection). *See* GERALD F. HESS & STEVEN FRIEDLAND, TECHNIQUES FOR TEACHING LAW 107-08 (1999).

75. BEST PRACTICES, *supra* note 4, at 165.

76. *Id.*

77. *Id.* at 165, 167. According to *Best Practices*, experiential education should, inter alia, provide students with clear and explicit information on objectives and assessment; focus on objectives well-suited for experiential education; and train both instructors and students on how to give and receive feedback. *Id.* at 168-79. Other practices are listed as well, but I highlight the ones listed here.

78. *Id.* at 179.

79. *Id.* Jay M. Feinman contrasts simulations with doctrinal and clinical teaching. *See* Feinman, *supra* note 3, at 470. If doctrinal teaching is primarily concerned with hypotheticals, and if clinical teaching is primarily focused on the client, then simulations lie "[i]n between." *Id.* He suggests that simulation courses run along a continuum from doctrinal problems to courses built entirely around lawyering activities. *Id.* Steven Hartwell suggests that simulation "is a model that combines the clinic field model and academic teaching in providing a complete experiential sequence." Steven Hartwell, *Six Easy Pieces: Teaching Experientially*, 41 SAN DIEGO L. REV. 1011, 1016 (2004); *see also* Ferber, *supra* note 3, at 418 (stating that "[p]roperly designed" simulations can help students effectively "develop the appropriate knowledge, abilities, and attitudes"); Kris Franklin, *Sim City: Teaching "Thinking Like a Lawyer" in Simulation-Based Clinical Courses*, 53 N.Y.L. SCH. L. REV. 861, 866 (2008/2009) ("we can conceive of simulation-based courses serving both of these functions and as ideal sites for teaching students both the most elemental as well as the most complex forms of legal thought"). Noting the value of simulations teaching, Madeline Schachter wryly notes that "[s]imply because one has been an attentive passenger in a car doesn't automatically mean he's able to drive a car and navigate hazardous road conditions." MADELEINE SCHACHTER, THE LAW PROFESSOR'S HANDBOOK: A PRACTICAL GUIDE TO TEACHING LAW 159 (2004).

80. BEST PRACTICES, *supra* note 4, at 180. Philip G. Schrag suggests that "[i]t is probably not desirable to replace the case and problem methods of instruction by redesigning law school curricula entirely around simulation exercises. It might be useful, however, to give simulation a considerably larger role in law school than it presently plays." Philip G. Schrag, *The Serpent*

The report suggests a number of best practices for simulations courses, some of which bear mention here. Students should be told up front the objectives of the course, and understand assessment criteria.[81] Simulations should be used for objectives that can best be obtained through experiential education.[82] Instructors should be trained to give useful, candid, and constructive feedback, and students should also be trained to receive feedback.[83] Educational goals for simulations should be clearly stated.[84] Simulations should be appropriate in light of the experience level and size of the student group.[85] Although clear instructions are usually important, sometimes education can be enhanced by "*not* informing students of the goals, rules, or procedures in advance."[86] Instead, instructors might introduce a simulation to provide a context, with instructions, readings, and discussions to follow subsequently.[87]

Significantly, instructors should carefully balance "detail, complexity, and usefulness."[88] But the key is striking the proper balance between providing realism and providing too much detail:

> Fidelity of the simulation to the real world analog is a critical aspect of design, because it fosters transference of learning from the exercise to the real world and motivates students to engage in the exercise and to suspend disbelief. Yet too much detail can increase the complexity of the exercise. If the exercise is too

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Strikes: Simulation in a Large First-Year Course, 39 J. LEGAL EDUC. 555, 569 (1989). Even *Best Practices* admits that simulations are not a panacea, conceding that "very few, if any, simulation courses develop proficiency in any professional skill to the level that a new lawyer needs." BEST PRACTICES, *supra* note 4, at 181. However, *Best Practices*' criticism of simulations is overstated: practice proficiency is probably an unrealistic goal for a survey course taught through simulations. Indeed, if "practice proficiency" means expertise, then many practitioners spend careers developing proficiency. Regardless, *Best Practices* correctly states that simulations serve other critical purposes, such as exploring complexities, and permitting insights gained through the safe commission of "'first-level errors.'" *Id.* at 182 (quoting remarks of Anthony G. Amsterdam, Remarks at Deans' Workshop, ABA Section of Legal Education and Admissions to the Bar, Jan. 23, 1982 (unpublished)). Moreover, simulations provide the opportunity to exaggerate and repeat "activities that could not take place" with real clients. CARNEGIE REPORT, *supra* note 4, at 119. In a clinic, the teacher would have to properly supervise to prevent malpractice. In a simulation, the teacher can wait until after simulated "malpractice" occurs, permitting reflection on where things went wrong.

81. BEST PRACTICES, *supra* note 4, at 168.

82. *Id.*

83. *Id.* at 174-77.

84. *Id.* at 180.

85. *Id.* at 184-85.

86. *Id.* at 185 (emphasis added).

87. *Id.*

88. *Id.* at 186; *see also* Feinman, *supra* note 3, at 473 (noting that factual complexity and uncertainty intertwine).

> complex, there may be insufficient time available for it, the students may become focused on trying to learn the rules and procedures, and the exercise founders because students are too discouraged to participate fully in the exercise.[89]

Finally, debriefing with the class—shared reflection of the group's experience—"'is perhaps the most important part of a simulation[.]'"[90] This allows the instructor and class to consider how issues might have been resolved, and to evaluate the simulation's effectiveness.[91] Such debriefing and reflection may also be extremely useful while the scenario unfolds, so that "course corrections" might be made to the "navigation" of the simulation. This might permit instructors to fine-tune a simulation while it proceeds to maximize the effectiveness of the experiential learning.

III. BUILDING A CYBERSIMULATION

If, as Shakespeare said in *As You Like It*, "[a]ll the world's a stage,"[92] then the successful playwright needs competent writing, stagecraft, and back-office support.[93] Here, the playwright is the legal educator using the live Internet for law teaching. This Part therefore addresses in some detail the plotting and architectural steps taken by the author in building a Cybersimulation.[94] It first discusses the need for the "playwright" to assign characters and develop plot. Second, it addresses "stagecraft," namely, the tools needed to build an online world, such as domain names, authoring software, and service providers. Finally, it addresses the need for "back-office support," namely, steps taken to avoid real-world disputes for the professor or the students.[95] Importantly, this Part focuses primarily on the tools

89. BEST PRACTICES, *supra* note 4, at 186.

90. *Id.* at 187 (quoting David Crookall, *Debriefing*, 23 SIMULATION & GAMING 141 (1992)).

91. *Id.*

92. WILLIAM SHAKESPEARE, AS YOU LIKE IT act 2, sc. 7.

93. *See* Ferber, *supra* note 3, at 439 (noting that designing a simulation is like writing a story, "highly creative and individualized").

94. Simulations teaching is a common technique. But to my knowledge, my Cyberskills approach is unique. There are some precedents, however. Eric Goldman bases examinations off of live websites that students view during the exam. *See* Goldman, *supra* note 5, at 759. Another example is the SIMPLE project and its precursors. SIMPLE stands for "SIMulated Professional Learning Environment." *See* Karen Barton et al., *Authentic Fictions: Simulation, Professionalism and Legal Learning*, 14 CLINICAL L. REV. 143, 143 (2007). The project uses an open-source simulation engine along with a suite of tools for academics and professionals. *See id.* at 143, 187.

95. A very abbreviated version of some of the matters discussed in Part III can be found in Nathenson, *Uncharted Waters*, *supra* note 39 (draft).

and techniques used to put the simulations together, reserving discussion of their application for Part IV. These tools permit the creation of a simulated law firm, a tool that *Best Practices* proposes as a model for the final year of law school.[96]

A. Playwriting—Plot, Characters, Props

This section addresses the author's role in creating the underlying plot, characters, and props. Over the course of the simulation, students will do projects addressing issues as diverse as personal jurisdiction, court and arbitration procedures, cybersquatting, trademark and copyright infringement, fair use, intermediary liability, defamation, CDA immunity, and computer hacking.[97] They will also confront realistic ethical quandaries and develop the full slate of *MacCrate* skills.[98]

1. Plot

Although the plot varies somewhat each year, I have developed a basic paradigm that permits both flexibility and consistency. Our "firm" represents a client that is upset about a website that may or may not be violating the client's legal rights. The defendant's domain name may be highly similar to our client's name, trademark, or domain name. The defendant's initial site is minimalistic and apocryphal, seeming to refer to our client in an opaque manner.

As students investigate, the defendant's website changes frequently. At some points, the defendant seems to be a classic cybersquatter, aiming to extort money from our client in exchange for the domain name. At other points, the defendant seems to be motivated by a higher purpose, such as legitimately griping about our client. The identity of the defendant may remain unclear for a while. The defendant's website gradually increases its legal offensive, adding images, meta-tags, and buried text. It later becomes an interactive website with a live blog and reader comments. At this point, the defendant may step up its conduct dramatically by creating an online store with a real online e-commerce provider, through which products are offered for sale using the "client's" name, trademarks, or domain name.

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96. *See* BEST PRACTICES, *supra* note 4, at 280.

97. *See infra* Parts IV.A.3.a (cybersquatting project) and IV.A.3.b (intermediaries project).

98. *See infra* Parts IV.B.2 (skills) and IV.B.3 (values).

2. Characters

The cast of characters used for the Cybersimulations included a law firm, client, opposing parties, certain intermediaries, and others. Some of these characters were invented from scratch, and others were co-opted by enlisting real-world entities to unknowingly serve as characters within the confines of the simulation.

First is the law firm of "Thomas, Thomas, and Thomas PLLP," also branded as "T-Cubed." A nod to my home institution, St. Thomas University School of Law, the firm is entirely fictional, with the letters "PLLP" noted in simulation correspondence as a "Pretend Limited Liability Partnership created for teaching purposes." As professor, I also play the role of managing partner.[99] The students, of course, are junior associates within the "firm."

Second is the client, including the corporate entity, its CEO, and its general counsel. Each year I come up with a new client for one of my two simulations domain names, IPHATTITUDEZ.COM and IPHATTITUDES.COM. The client's business names have varied from year to year, such as the "International Project on Human Attitudes" (2009, a public services organization), "I-P/H Attitudez" (2010, a shoe manufacturer), and the "Internet Project for Chronic Hypochondriasis Attitude Adjustment" (2011, a health advice organization). The common thread is that each client has *some reason* to be using one of the two domain names. Thus, one of the domains always "belongs" to the client, and the other is always co-opted by the defendant. One of the key reasons for selecting the two domains is that the acronym "I.P.H." and the amorphous term "ATTITUDE" permits yearly variations in company name, the goods/services, and the underlying plot. The similarities in the domains further set the stage for cybersquatting scenarios. As professor, I play the client's CEO and general counsel, typically through memoranda and email.

Third are adverse parties and their attorneys. During the simulation, I wear many hats, including professor, managing partner, and the direct opponent. Because the core defendant is my doppelganger, he or she uses my name in reverse: *Ari (or Ariel) Nosnehtan*. During the enforcement, Ari/Ariel sometimes emails student T-Cubed attorneys, and sometimes is represented by an attorney (also played by me).

Fourth are the Internet intermediaries described in more detail in Part III.B.3. These are real-space Internet and online service

99. *See* Ferber, *supra* note 3, at 424 (describing professor's role as "senior partner").

providers. Although none of these entities are violating any law in relation to my class or sites, I set up the simulations so that students must grapple with issues of intermediary liability for the hosting and e-commerce providers. Although students are instructed *not* to contact these real-world entities, they nevertheless prepare files with otherwise realistic takedown notices.

Finally are miscellaneous characters created to add realism and to introduce additional issues. For example, at a midpoint in the simulation, Ari creates a blog that purports to gripe about our client. On the blog, Ari invites the "public" to post comments about our client. In short order, a number of blog comments appear, raising issues such as defamation, CDA immunity, hacking, and more. Of course, all of the blog "comments" are planted by me by using the names of additional fictional persons.

3. Props

Although the client's and defendant's sites are the most important props, many other props flesh out the simulation's realism. First are the trademarks used for the simulation. Each year, the client needs trademark rights in order for the cybersquatting simulation to take place. Each year, these trademarks vary. The main marks and goods/services used so far have been: IPHATTITUDEZ for shoes; IPH ATTITUDES for human betterment education services; I-P/H ATTITUDEZ for clothing and shoes; and I.P.H. ATTITUDES for health counseling services.[100] I also create trademark registrations for the client's various marks, using the information format for real trademark applications and registrations from the U.S. Trademark Office website.[101] Each registration includes a laundry list of goods or services, including international classification, serial/registration number, first date of use, and its live/dead status.[102]

I also create a history for the dispute. In the real world, outside counsel may be asked to take on a matter that has previous history.

100. The clients owned other marks as well, and the listing of goods and services was more extensive than noted above.

101. For an example, go to http://www.uspto.gov, click on the "Trademarks" tab to access the drop-down menu, select "Trademark Search," and then search for any common term using "Basic Word Mark Search."

102. For example, I gave the 2008 IPHATTITUDEZ mark fictional registration number 895150XY in international classes 3, 18, and 25 for a wide variety of personal care products, bags, and types of clothing. To make it extra realistic, I adapted real registration information from these classes as contained in the database of the United States Patent and Trademark Office, http://www.uspto.gov.

Sometimes that history may significantly affect the merits of the dispute. For the simulation, I may create a paper trail of previous communications between the client and the defendant that arose prior to the new conflict. Depending on the nature and timing of the prior correspondence, the history may significantly complicate the enforcement for our "firm."

In addition, I sometimes create a background check for the defendant. Invariably, the students ask if we can learn anything about the defendant besides what he or she has posted to the website. I therefore create a background check. The background check permits insertion of issues such as: possible places of residence, age, gender, criminal history, lawsuit history, outstanding liens and judgments, and more. Such facts may be highly relevant to our analysis of personal jurisdiction, the likelihood of satisfying a judgment, and whether we should choose federal court action or the less-expensive but limited domain name arbitration process.

Finally, we "run" conflict checks. I ask students to scour the sites to determine any interested and possibly adverse parties. We run a conflicts check and I provide the students with the results.

B. Stagecraft—Technical Needs

According to the Oxford English Dictionary, "stagecraft" is "that part of the art of dramatic composition which is concerned with the conditions of representation on the stage."[103] Another source states that stagecraft creates the "temporary and illusory environment of the stage."[104] Because a Cybersimulation is no different from an interactive play, I had to engage in appropriate stagecraft, choosing relevant domain names and using authoring tools to create a world sufficiently believable to provide a realistic teaching simulation. As explored below, these tools are generally inexpensive, often free, and usually easy to master.

1. Domain names

Domain names are the core of the simulations. As a fundamental component of the Internet's architecture, domain names are easy-to-remember mnemonics that map to the otherwise cumbersome numeric "Internet Protocol" addresses of websites.[105] Thus, rather than trying

103. OXFORD ENGLISH DICTIONARY ONLINE, http://www.oed.com/viewdictionaryentry/Entry/188653 (last visited Sept. 6, 2011).

104. DANIEL A. IONAZZI, THE STAGECRAFT HANDBOOK 7 (1996).

105. Ira S. Nathenson, *Showdown at the Domain Name Corral: Property Rights and*

to remember a numeric string such as 157.166.226.25, one can use CNN.COM. Because domain names are unique, they also provide one of the most persistent flashpoints in cyberlaw disputes.[106] Accordingly, the core tools used in the simulations were two domain names: IPHATTITUDES.COM and IPHATTITUDEZ.COM. This permitted the creation of websites for a "client" and a purported wrongdoer. Registration of domain names is inexpensive. Numerous companies offer domain registration services, which typically run on the order of $10-$15 per domain per year.[107] Although there are now numerous "top-level domains" to use besides the ubiquitous .COM, I use .COM because it is the most prevalent.

2. Authoring tools

Authoring tools can be used to create the content of the simulation sites. The key to creating content is not technical savvy, but instead the patience needed to learn the basics of authoring tools, which are often no more complex than a word processor.[108] The two major forms of authoring used were basic HTML (hypertext markup language), and the more powerful WordPress blogging platform. HTML is the basic language of webpages. There are many authoring and scripting languages that are far more complex than HTML, most of which fall outside the range of my programming ability.[109] But one need not learn sophisticated languages to create rich simulations. For example, a basic HTML webpage saying "Hello, world!" would

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Personal Jurisdiction over Squatters, Poachers and Other Parasites, 58 U. PITT. L. REV. 911, 918-20 (1997) [hereinafter Nathenson, *Showdown*].

106. "Trademark disputes have been a fixture of Internet law since the first days of commercial traffic on the network." Dan L. Burk, *Cybermarks*, 94 MINN. L. REV. 1375, 1375 (2010); *cf.* Margreth Barrett, *Domain Names, Trademarks and the First Amendment: Searching for Meaningful Boundaries*, 39 CONN. L. REV. 973, 976 (2007) (discussing the role of the First Amendment in limiting trademark overreach on the Internet, with specific focus on domain names). Thousands of domain name conflicts have also been decided using private arbitration procedures. *See Uniform Domain Name Dispute Resolution Policy*, INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS, http://www.icann.org/en/help/dndr/udrp/policy (last visited Apr. 27, 2012) [hereinafter *UDRP Policy*].

107. Longer-term registrations typically provide discounts.

108. Although my colleagues consider me to be an experienced webmaster, my knowledge of programming is really quite minimal. Although I took a few computer science classes as an undergraduate and once ran an Electronics Boutique store, my programming skills are limited. This admission underscores the ease of creating simulations: one need not be a programming wizard to stage simulations, because authoring tools are simple and powerful. It is true that simulations are extremely time-consuming, but the time spent is in design, implementation, role-playing, and assessment rather than in learning esoteric programming languages.

109. Examples include PHP, Javascript, CSS, and AJAX. *See* Online Web Tutorials, W3SCHOOLS, http://www.w3schools.com (last visited Mar. 6, 2012).

consist of the following code, saved as a filed named "index.htm," and uploaded to one's server:

```
<html>
<body>
<p>Hello, world!</p>
</body>
</html>
```

In fact, one could omit all but the third line, and the code would still work. HTML becomes even simpler when coded through one of the many WYSIWYG (what-you-see-is-what-you-get) editors available both commercially, such as Adobe Dreamweaver, and freely, such as Seamonkey.[110] In addition, many sites provide helpful HTML tutorials.[111] HTML webpages can also include "meta-tags," which are invisible codes embedded into a webpage for purposes of search-engine indexing.[112] Meta-tags have been often abused by trademark infringers, leading to numerous lawsuits, making them ideal for inclusion in the simulations.[113]

Even easier to use than HTML is an established content-management platform such as WordPress.[114] Novices can create a free website at WordPress.com, which can then be used through one's domain name of choice.[115] Although WordPress was initially created

110. *See* Jennifer Kyrnin, *The 10 Best Windows WYSIWYG Editors*, ABOUT.COM, http://webdesign.about.com/od/windowshtmleditors/tp/windows-wysiwyg-editors.htm (last visited Mar. 6, 2012); Jennifer Kyrnin, *Free WYSIWYG Web Editors for Windows*, ABOUT.COM, http://webdesign.about.com/od/htmleditors/tp/aatpfreewyswin.htm (last visited Mar. 6, 2012).

111. *See, e.g.*, *HTML Tutorial*, W3SCHOOLS, http://www.w3schools.com/html/default.asp (last visited Sept. 6, 2011). This site also permits previews of how code will render on the Internet. *See, e.g.*, http://www.w3schools.com/html/tryit.asp?filename=tryhtml_intro (last visited Mar. 6, 2012).

112. *See HTML Meta*, W3SCHOOLS, http://www.w3schools.com/html/html_meta.asp (last visited Apr. 14, 2012). For meta-tag code that can be tested online and then copied, see http://www.w3schools.com/html/tryit.asp?filename=tryhtml_keywords (last visited Apr. 14, 2012).

113. *See, e.g.*, Eric Goldman, *Deregulating Relevancy in Internet Trademark Law*, 54 EMORY L.J. 507, 529-32 (2005); Ira S. Nathenson, *Internet Infoglut and Invisible Ink: Spamdexing Search Engines with Meta-Tags*, 12 HARV. J.L. & TECH. 43 (1998) [hereinafter Nathenson, *Infoglut*].

114. WORDPRESS, http://www.wordpress.com (last visited Apr. 14, 2012). Other quality blogging platforms exist as well, such as Blogger and TypePad. *See* BLOGGER, www.blogger.com/ (last visited Apr. 14, 2012); TYPEPAD, www.typepad.com (last visited Apr. 14, 2012).

115. Because WordPress.com is limited in the themes that can be used through that service, more ambitious professors may wish to do direct installations of the software found at

as blogging software, it is now a powerful tool for the easy creation of sophisticated websites. Fortunately, WordPress remains easy to use. Pages are created with a WYSIWYG interface, and sites can contain anywhere from one to numerous pages, with or without blogging features. Images, videos, and sounds can be easily incorporated into a site. WordPress, whether hosted via WordPress.com or self-installed using the software found at WordPress.org, is also customizable with a number of themes, which can be used to choose a "look and feel" for a site.[116] Plugins available for self-installs also permit the addition of many features.[117] Perhaps most impressively, WordPress.com and WordPress.org both offer a powerful "widget" feature, permitting designers to place text, graphics, links, search boxes, calendars, and other components on a page by "dragging" and "dropping" the widgets into a target area. This permits rich sites to be created through nothing more than a few clicks of the mouse. For example, the Fall 2011 "client" site was created using WordPress in a few hours. I spent more time looking for images to use than in setting up the site.

3. Service providers

a. Hosting

Hosting services store the sites' content. Although a domain name serves as the mnemonic address for a site, website content is not contained at the domain name. Instead, the content must be hosted through an Internet Service Provider ("ISP"), and the domain name associated with the Internet Protocol address of the hosted content.[118] Some ISP hosts are free (such as WordPress.com), but their features may be somewhat limited for professors wanting to heavily customize their sites.[119] Fortunately, hosting plans are not expensive. For

WordPress.org through their own hosting providers outside of WordPress.com. This option provides more flexibility and customization, and greater choice themes (as well as the option of selecting plugins). Good hosting services will often have easy-to-use control panels that permit one-button installation of WordPress.org software on the user's domain of choice. Hosts are discussed in the next section below.

116. *See Free Themes Directory*, WORDPRESS, http://wordpress.org/extend/themes/ (last visited Mar. 6, 2012).

117. *See Plugin Directory*, WORDPRESS, http://wordpress.org/extend/plugins/ (last visited Mar. 6, 2012).

118. A good domain registrar and hosting service can explain how to configure this for your particular setup.

119. As noted, although WordPress.com hosting is free, users are limited to the themes, widgets, and tools provided on the site. If one wants to use any of the thousands of plugins or other themes, one must install WordPress into a hosted space on an independent ISP.

example, I pay less than $15 a month to host all of my websites, including a professional site, weblog, two simulations sites, and more.[120] Hosting plans vary by expected bandwidth usage and other features. Generally speaking, simulation sites should not use a tremendous amount of bandwidth, since multimedia content may be minimal, or offloaded onto free sites such as YouTube, and usage will mostly be limited to students.

b. Email

Email accounts will be needed for the "characters" of the simulation, such as the managing partner, client, infringer, Digital Millennium Copyright Act ("DMCA") agent,[121] and more. Email providers are also free, including services such as Google Mail, Hotmail, and Yahoo Mail. Ambitious faculty who engage paid hosting services may also choose to create email addresses using their domain names (such as webmaster@iphattitudes.com or the like).

c. E-commerce

E-commerce sites provide online services that can be used for a wide variety of simulations-related needs. For example, CafePress (http://www.cafepress.com), which permits users to upload graphics for the purposes of selling t-shirts, mugs, calendars and more, can be used to stage a realistic (and real) e-commerce site for either a "client" or a fictional "infringer." This permits issues of commercial intermediary liability to be incorporated into the simulation.[122]

Anonymizing services, such as those provided by Domains By Proxy (http://www.domainsbyproxy.com), are useful for lawfully obfuscating the contact information for a domain name. For example, masking the contact information for the "defendant's" domain means that, for the students, the publicly listed registrant is not the professor, but instead a mysterious and possibly malicious person hiding behind a veil of anonymity. It also permits discussion of the benefits and dangers of privacy and online anonymity.

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120. For example, my host of choice charges as low as $3.96 per month depending on the plan. *See, e.g.*, *HostGator Control Panel*, HOSTGATOR, http://www.hostgator.com/shared.shtml (last visited Mar. 6, 2012).

121. 17 U.S.C. § 512(c)(2) (2006).

122. Because I set up the CafePress sites, no actual infringement takes place because I upload original content created for the simulation. But *within the simulation*, we can explore issues relating to direct liability, secondary liability, and the impact of notice-and-takedown regimes. *Cf.* Ira S. Nathenson, *Looking for Fair Use in the DMCA's Safety Dance*, 3 AKRON INTELL. PROP. J. 121, 136-37 (2009) (discussing "'quasi-DMCA'" takedown regimes).

Flickr (http://www.flickr.com) can be used to search for public domain and Creative Commons licensed photographs to use on the sites. This allows sites to be populated with rich graphic content for free without undue risk of copyright liability.

d. Others

In addition to e-commerce sites, the Web contains numerous useful sites that can be used either as part of the simulation, or for "associate" research purposes. For example:

- WHOIS servers can be used to determine the registrant of record for a domain name;[123]
- Traceroutes and network lookups can be used to determine the Internet Protocol address for a domain name as well as to determine the responsible ISP;[124]
- The U.S. Patent and Trademark Office can be used to check trademark records;[125]
- The U.S. Copyright Office can be used to search listings of designated agents for service of DMCA takedown notices;[126] and
- ICANN, the creator of the Uniform Domain Name Dispute Resolution Policy ("UDRP"), maintains a site with useful information on the UDRP, which is a mechanism for non-binding domain-name dispute arbitration.[127] The sites of authorized arbitration providers, such as WIPO, also contain useful information such as a sample complaint.[128]

In addition, special mention should be made of the excellent *Chilling Effects* clearinghouse, which maintains a searchable database

123. *See, e.g.*, BETTER-WHOIS.COM, http://www.betterwhois.com (last visited Mar. 6, 2012).

124. *See, e.g.*, NETWORK-TOOLS.COM, http://www.network-tools.com (last visited Apr. 14, 2012) (giving a user the option to select computer network diagnostic tools such as "traceroute," "ping," "DNS Records," and "Whois").

125. *See* UNITED STATES PATENT AND TRADEMARK OFFICE, http://www.uspto.gov (last visited Apr. 14, 2012).

126. *See* UNITED STATES COPYRIGHT OFFICE, http://www.copyright.gov (last visited Apr. 14, 2012).

127. *See UDRP Policy*, *supra* note 106.

128. *See UDRP Procedures for Generic Top Level Domains (gTLDs)*, WORLD INTELLECTUAL PROPERTY ORGANIZATION, http://www.wipo.int/amc/en/domains/gtld/udrp/ (last visited Apr. 14, 2012).

of cease-and-desist letters, DMCA takedown notices, and DMCA counter-notices.[129] Although the site was created to bring greater transparency to often-overreaching private copyright enforcement, it can also be used as a database of demand letters for student "associates" when drafting their own. Because some demand letters in *Chilling Effects* may contain errors in law, fact, or strategy, students must read such letters critically and adapt them intelligently.[130]

C. Back-Office Support—Due Diligence, Curtains

Whenever possible, I ran the simulations on the live Internet to make them as realistic as possible. We therefore needed real websites to raise issues such as cybersquatting, intellectual property infringement, and defamation. But it was equally critical that students engaged in no real-world lawyering and contacted no real third parties. Although the Cybersimulations share similarities with clinical instruction, we were not handling real cases or clients. Therefore, all simulation-related communications had to be sent to or received by me so that students did not engage in the unauthorized practice of law.[131] Moreover, I had to find a way to do all of this live and online, in a way that avoided unintentional violations of anyone's real-world rights. This section addresses due diligence in plotting and staging, "thinvisibility" technologies that can help to minimize the simulation footprint, and the benefits of internal and external disclaimers.

1. Due diligence

Although I wanted the role-playing experience to be as realistic as possible, I had no desire to expose anyone to potential real-world

129. *See* CHILLING EFFECTS, http://chillingeffects.org (last visited Apr. 14, 2012).

130. *See Polo Ralph Lauren Bops BoingBoing Over Ad Post*, CHILLING EFFECTS (Oct. 2, 2009), http://www.chillingeffects.org/dmca512c/notice.cgi?NoticeID=28998; Cory Doctorow, *The Criticism that Ralph Lauren Doesn't Want You to See!*, BOING BOING (Oct. 6, 2009), http://boingboing.net/2009/10/06/the-criticism-that-r.html; *see also* Lenz v. Universal Music Corp., 572 F. Supp. 2d 1150, 1154-55 (N.D. Cal. 2008) (holding that complaint stated a claim for material misrepresentation in Universal's takedown notice); *Takedown Hall of Shame*, ELECTRONIC FRONTIER FOUNDATION, https://www.eff.org/takedowns (last visited Mar. 19, 2012).

131. As a Pennsylvania attorney teaching in Florida, I had to be careful not to engage in the practice of law or to permit my students to practice law. More importantly, I had to make sure that my students were not practicing law, either. *See* FLA. STAT. ANN. § 454.23 (West 2010) (unauthorized practice of law in Florida a third-degree felony); FLA. R. JUD. ADMIN. 2.505 (West 2010) (foreign attorneys not permitted to practice in Florida except as permitted by Fla. R. Jud. Admin. 2.505); *cf.* FLA. R. PROF. COND. 4-5.1 (West 2010) (supervising attorneys responsible for conduct of subordinate attorneys).

liability for trademark infringement or other claims.[132] Neither did I want to risk any ethical problems for me or my students. Therefore, it was important to craft the simulation with care. The initial and most visible components of the simulation would be the domain names and websites, because they are the most public. I therefore avoided choosing domains based on famous marks such as SONY or NIKE. But it was also important that the domains seem realistic in order to foster an immersive simulation. Thus, although the safest route would have been a random series of letters—for example, "GLRRBGH"—such a symbol would be of little value for role-playing.[133] I needed domain names and trademarks that actually *sounded* like trademarks.[134]

That is why I chose IPHATTITUDES.COM and IPHATTITUDEZ.COM. They seem somewhat *trademark-ish* without being actual trademarks. They had the further benefit of combining a number of amorphous words, "I," "PHAT," and "ATTITUDE."[135] Further, the initials "I.P.H." could serve as an acronym for a variety of fictional organizations. Because the two domains were nearly identical, I could use them for a variety of cybersquatting scenarios. Most importantly, the domain names were sufficiently different from any trademarks I could find through my searching. They were sufficiently bizarre and unique that I felt comfortable that I was not creating any real-world conflicts. Nevertheless, I engaged in trademark searching on the domains and variants to determine whether there were any potential conflicts.[136] Professors considering Cybersimulations of this nature also ought to engage in trademark

132. *See, e.g.*, 15 U.S.C. § 1114(1)(a) (2006) (infringement of registered trademark); *id.* § 1125(a)(1) (false designation of origin); *id.* § 1125(c) (trademark dilution); *id.* § 1125(d) (cybersquatting); *see also UDRP Policy*, *supra* note 106; Nathenson, *Showdown*, *supra* note 105.

133. The term "GLRRBGH" is a coined term that is fanciful, and would qualify for immediate trademark protection upon use in commerce; however, it is exceedingly unlikely that such a term would be chosen in the real world as a mark. *See* Wal-Mart Stores, Inc. v. Samara Bros., Inc., 529 U.S. 205, 210-12 (2000) (discussing Abercrombie & Fitch Co. v. Hunting World, Inc., 537 F.2d 4, 10-11 (2d Cir. 1976)).

134. Similar concerns arose regarding selecting the name of the fictional client, adverse party, and other features of the simulation. For simplicity's sake, I will focus here on the domain names.

135. According to the Urban Dictionary, "phat" means "cool" or "pretty hot and tempting." URBAN DICTIONARY, http://www.urbandictionary.com/define.php?term=phat (last visited Mar 12, 2012).

136. Similar concerns exist for any portions of the simulation that may be viewed publicly, such as the publicly posted name of the client. The mechanics of trademark and name searching are well beyond the scope of this Article, however.

searching in order to minimize the chance of conflicting with real-world rights.[137] If the professor is not versed in trademark law or the mechanics of searching, it might be possible to get *pro bono* assistance from an interested trademark attorney.

Similarly, regarding the content of the site, I generally relied on open-source code, such as HTML and WordPress. Most themes for WordPress are also open-source, permitting me to use an existing design template without known copyright restrictions. Most of the images I used were either my own, or obtained through licensed clip art, or obtained from the public domain. Although I would not hesitate to rely on fair use at times, I generally limited myself to licensed or public domain materials.

2. Thinvisibility

In addition to taking steps to clear my simulation sites, I wanted to limit the sites' public visibility so that their practical public footprint was minimal. With a live and public site, complete obfuscation is not possible. The reality of the public Internet is that most content is "thinvisible," i.e., that most material on the Web goes unnoticed until it is noticed.[138] However, steps can be taken to limit visibility. The first is the use of the robots exclusion standard.[139] By placing a few lines of code in the main directory of a website's server, one can request that search engines and Internet archives neither index nor cache the content. This helped significantly to limit online presence, and the sites' footprint on Google was minimal.

Second, I found domain anonymity services to be useful. After registering domains, I fell upon a quandary. Domain name "WHOIS" database records listed me as the true registrant of the "infringer's"

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137. Some cases say that there is no pre-existing duty to conduct a trademark search. *See, e.g.*, Money Store v. Harriscorp Finance, Inc. 689 F.2d 666, 670-72 (7th Cir. 1982); Shoreline Development, Inc. v. Cendant Corp., NO. 3:00CV7393, 2002 WL 818070, at *4 n.4 (N.D. Ohio, Apr. 23, 2002) (same). However, some authority suggests that a client who chooses not to search despite counsel's advice to the contrary may be acting in bad faith. *See* Int'l Star Class Yacht Racing Ass'n v. Tommy Hilfiger U.S.A., 146 F.3d 66, 69 (2d Cir. 1998) (holding that a defendant's failure to follow counsel's advice to conduct a full search was relevant to bad faith). Professor McCarthy correctly advises that trademark searching is prudent. *See* 3 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 19:6 (4th ed. 2009).

138. "Thinvisibility" means "[b]eing a tiny, shiny needle in a haystack of information overload," or, "[b]eing visible." Ira S. Nathenson, *Social Networking Word-of-the-Day: "thinvisibility,"* NATHENSON'S DIGITAL GARBAGE (Aug. 10, 2010), http://digitalgarbage.net/2010/08/10/thinvisibility/.

139. *See* THE WEB ROBOTS PAGES, http://www.robotstxt.org/ (last visited Sept. 12, 2011); *see also* Field v. Google, 412 F. Supp. 2d 1106, 1113 (D. Nev. 2006) (discussing function of robots.txt files).

domain name. But I wanted students to use the live Internet to do their fact-finding and documentation. I therefore did not want students seeing *my* name as the owner of the defendant's domain name. Although many cybersquatters provide false contact information, I was in no position to lie, because domain name registrars require real-world names and contact information.[140] Luckily, it is possible to register the domain truthfully but anonymously by using a domain name proxy service.[141] By using such a service, my name was not publicly listed as the domain's owner. That way, I could present a useful fiction for purposes of the classroom simulation. Because the "defendant" was "hiding" behind anonymity, this introduced additional texture to the simulation.

3. External and internal disclaimers

Finally, I took steps to avoid legal or ethical problems. First, I placed external disclaimers on my sites when feasible to inform the public of the nature of the sites. In the unlikely chance that the sites would become the subject of real-world scrutiny, such disclaimers would serve to inform the public of the dual nature of the sites: fictional and educational.

Second, I repeatedly cautioned the students against exceeding the boundaries of the simulation. Students were warned that they may not talk to anybody outside of our "firm's" practice group. This reinforced the importance of client confidentiality,[142] and in addition, reduced the danger of collaboration between current students and outsiders such as former cyberlaw students or practicing attorneys. Students were also instructed that they may send cease-and-desist letters only to email addresses expressly approved by the instructor. These email addresses, of course, were operated by me in my role as

140. This issue provided fodder for classroom discussion. The issue is: if I lie to the domain registrar in creating the classroom domain name, would I violate the Computer Fraud and Abuse Act ("CFAA"), which *criminalizes* certain acts that "exceed[] authorized access" to certain computer systems? 18 U.S.C. § 1030 (2006). This issue arose in the *Lori Drew* case, where Drew was federally prosecuted under the CFAA for lying to Myspace when creating an account that she used to harass a teenage acquaintance of her daughter. *See* United States v. Drew, 259 F.R.D. 449, 452 (C.D. Cal. 2009). After a misdemeanor conviction by a jury, the court granted the defendant's motion for judgment of acquittal. *See id.* at 451, 468; *see also id.* at 465 (holding that using "violations of the terms of service as the basis for [a CFAA] crime, . . . the website owner . . . ultimately defines the criminal conduct"). Also, under federal law, the knowing provision of "materially false contact information to a domain name registrar" creates a "rebuttable presumption that the violation is willful." 15 U.S.C. § 1117(e) (2006).

141. *See* DOMAINS BY PROXY, http://www.domainsbyproxy.com (last visited Mar. 20, 2012).

142. *See* MODEL RULES OF PROF'L CONDUCT R. 1.6 (2010).

infringer. This limitation protected both students and me. Regarding the students, it must be remembered that students were acting, within the simulation, as fictional practicing attorneys. Any demand letters emailed directly to an entity outside the simulation would very reasonably be understood to be real. Such demands could subject students to charges of unauthorized practice of law. They could also provoke real-world intermediaries into taking down my website.

IV. LEARNING CYBERLAW (AND LAW) THROUGH CYBERSIMULATIONS

As the cinematic Wizard of Oz exclaimed when his identity was revealed: "Pay no attention to that man behind the curtain!"[143] In that moment, Dorothy saw through the illusion and lost her belief in the Wizard's power.[144] Equally so, an unbelievable illusion serves as a poor basis for an educational simulation, and a paramount goal of such a simulation must be to avoid the failures of the Wizard of Oz. Cybersimulations should use levels of realism sufficient to foster immersive learning, but not be so complex that the details overwhelm students.[145] The goal must be *useful* immersion. Therefore, the professor should create simulations that engage students intellectually and even emotionally, neither sacrificing realism nor overloading students with detail.[146] This Part addresses the operations of the Cybersimulations. It addresses, in turn, the teaching methodology of the course; the extent to which Cybersimulations permit integration of doctrine, theory, skills, and values; and the benefits of assessment when provided as an experiential and formative component of the simulations.

A. Teaching methodology

This section addresses the teaching methodology of the Cybersimulations. To provide students with a common doctrinal and theoretical vocabulary, we spent several weeks in "baseline"

143. THE WIZARD OF OZ (MGM 1939). The classic line is uttered by the Wizard of Oz while he directs the illusion of a Wizard from behind a curtain. *See id.*; *see also* YOUTUBE, http://www.youtube.com/watch?v=YWyCCJ6B2WE (last visited Mar. 20, 2012). Interestingly, this line does not occur in the "reveal" scene of the original book. L. FRANK BAUM, THE WONDERFUL WIZARD OF OZ 183-84 (1899).

144. *See* THE WIZARD OF OZ, *supra* note 143.

145. *See* Feinman, *supra* note 3, at 473 (noting value of complexity and uncertainty); Ferber, *supra* note 3, at 424 (noting that factual indeterminacy is essential).

146. *See supra* text accompanying notes 88-89.

learning.[147] After the baseline period, I introduced three role-playing projects aimed at the compilation of detailed, organized case files. The first two projects were rooted in the online simulations and focused on cybersquatting and intermediary liability. The third project required students to select an appropriate "hot" cyberlaw topic for development into an informational "client alert" for distribution to the firm's fictional clients. All projects were designed to integrate doctrine, theory, skills, and values, and to emphasize ongoing, "formative" assessment so that students could make "course corrections" to their lawyering and work product.

1. Baseline development

Instructors using simulations in an unfamiliar area of law and technology may wish to establish a shared "baseline" of knowledge before moving into simulated practice.[148] The need for such a baseline is underscored by the reality of modern law students. Although Millennials tend to be more technologically sophisticated than their predecessors, even today's law students vary significantly in their pre-existing knowledge of technology. Thus, even though today's students are largely "digital natives," not all are "digitally literate."[149] Therefore, in the early weeks, the cyberlaw course was not unlike any other doctrinal course using the case method pioneered by Christopher Columbus Langdell.[150] The course's initial use of the case method had a specific goal: to establish a common doctrinal and theoretical vocabulary that would be useful in the simulations.

Therefore, after reading the Easterbrook-Lessig debate on "The Law of the Horse,"[151] we read materials in the Ku & Lipton casebook on matters such as personal jurisdiction,[152] commerce clause,[153] first

147. THOMSON, *supra* note 39, at 95 (noting that "non-lecture" teaching is hard to do without first providing "foundational material").

148. As *Best Practices* notes, in designing curricula, law schools should help students to *progressively* develop "knowledge, skills, and values." BEST PRACTICES, *supra* note 4, at 8-9. Jay Feinman notes "[t]here can be considerable advantage to presenting none of the substantive material before students encounter the simulation." Feinman, *supra* note 3, at 477. As noted in the main text, I prefer a middle-of-the-ground approach, establishing a baseline sufficient to provide shared vocabulary and concepts.

149. THOMSON, *supra* note 39, at 28.

150. *See* Anthony Chase, *The Birth of the Modern Law School*, 23 AM. J. LEGAL HIST. 329 (1979).

151. *See supra* text accompanying notes 11-15.

152. *See* KU & LIPTON, *supra* note 6, at 32-72. Materials used from the casebook included Zippo Mfg. Co. v. Zippo Dot Com, Inc., 952 F. Supp. 1119 (W.D. Pa. 1997) (adopting sliding scale approach); Inset Systems, Inc. v. Instruction Set, Inc., 937 F. Supp. 161 (D. Conn. 1996) (adopting broad theory of personal jurisdiction).

amendment (such as filtering and indecency),[154] and defamation, including immunity under the Communications Decency Act ("CDA").[155] We also considered the benefits and problems of online anonymity.[156] These readings were useful for discussing the basics of cyberlaw doctrine and for searching for the "unifying principles" that Easterbrook coveted.[157] One such principle was the problem of Internet regulation raised by the exceptionalist debate: *who* should regulate cyberspace—states, countries, or Internet users? What *is* cyberspace—is it a place or something different?[158] We also discussed the reality that law is only one way of regulating conduct; in addition to laws, there are other constraints, such as Lessig's social norms, market forces, and the "code" of cyberspace itself.[159] We further discussed the differences between online actors, the intermediaries providing online services to those actors, and third parties objecting to their conduct. Sharing a doctrinal and theoretical vocabulary was important because the Cybersimulation projects required a nuanced

153. *See* Voyeur Dorm, L.C. v. City of Tampa, Fla., 265 F.3d 1232 (11th Cir. 2001) (speech regulation violates commerce clause); Am. Library Ass'n v. Pataki, 969 F. Supp. 160 (S.D.N.Y. 1997) (state library filtering requirements violate commerce clause); Washington v. Heckel, 93 P.3d 189 (Wash. Ct. App. 2004) (state spam email law not violative of commerce clause); *see also* KU & LIPTON, *supra* note 6, at 72-90 (providing excerpts from cases).

154. *See* Reno v. ACLU, 521 U.S. 844 (1997) (holding unconstitutional portions of Communications Decency Act); *see also* United States v. Williams, 553 U.S. 285 (2008) (upholding child pornography pandering statute); Ashcroft v. ACLU, 542 U.S. 656 (2004) (remanding case on constitutionality of Child Online Protection Act); United States v. Am. Library Ass'n, Inc., 539 U.S. 194 (2003) (finding filtering requirements of Children's Internet Protection Act to be constitutional); ACLU v. Mukasey, 534 F.3d 181 (3d Cir. 2008) (finding COPA to be unconstitutional). The Ku & Lipton casebook also includes excerpts from most of the cases noted above. *See generally* KU & LIPTON, *supra* note 6, at 135-66 (section with cases on indecency and filtering).

155. *See* 47 U.S.C. § 230(c)(1) (2006) ("No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider."); Zeran v. Am. Online, Inc., 129 F.3d 327 (4th Cir. 1997) (holding that AOL was immune from defamation liability). *See generally* KU & LIPTON, *supra* note 6, at 243-62 (for CDA cases including *Zeran*).

156. *See, e.g.*, Anne Wells Branscomb, *Anonymity, Autonomy, and Accountability: Challenges to the First Amendment in Cyberspaces*, 104 YALE L.J. 1639 (1995) (excerpted in KU & LIPTON, *supra* note 6, at 115-18). Regarding the right to speak anonymously, see McIntyre v. Ohio Elections Comm'n, 514 U.S. 334 (1995) (right to speak anonymously); Talley v. California, 362 U.S. 60 (1960) (same); ACLU v. Miller, 977 F. Supp. 1228 (N.D. Ga. 1997) (same); *see also* KU & LIPTON, *supra* note 6, at 174-81 (excerpting cases).

157. *See supra* Part II.A (discussing Easterbrook's demand for "unifying principles" in law school courses).

158. *See* Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CAL. L. REV. 439 (2003); *see also generally* KU & LIPTON, *supra* note 6, at 21-28 (excerpting Hunter).

159. *See supra* notes 14-15 and accompanying text.

understanding of Internet architecture, the nature of regulation, and the roles played by users, intermediaries, and third parties.

2. Introduction of Cybersimulations

After several weeks of baseline learning, I introduced the simulations. Each year, I went into the simulations with the outlines of a basic plan, adding details later as I gauged the students' responses. After several years of experimentation, I came up with the following routine, maximizing impact with minimal effort. When starting a simulation (usually near the beginning of September), I create a client site. Some years the client appears at IPHATTITUDES.COM and in others at IPHATTITUDEZ.COM. I then create the initial version of the defendant's site. Because most students do not initially understand the technology of website authoring, I prefer to use HTML for the initial versions of the defendant's site. I create a very simple site that lays out the framework of the soon-to-expand dispute. For example, the 2011 client site was a well-developed and graphically rich health advice site that said "We can help." The defendant's site responded with only three words in two lines of code: "No you can't." As we studied relevant cyberlaw doctrine (such as trademark law), I changed the defendant's site to introduce additional issues.

This approach is similar to improvisational theatre. Once one establishes basic facts, the facts are accepted and expanded upon by the group as a whole.[160] One scholar, commenting on the benefits of such techniques for educators, noted criteria used by improv actors in evaluating performance:

- *Collaboration.* "The performance should be fully collaborative, with no one person 'driving' the narrative."[161]
- *Acceptance.* "Players should not ignore or contradict each other's contributions to the scene . . . ."[162]
- *Advancement.* "The 'platform,' or narrative elements such as

160. *See* DAN DIGGLES, IMPROV FOR ACTORS 31 (2004) ("Whatever your partner says, say 'Yes!' to it . . . and add one more thing to make the offer even better."). Another author suggests using the techniques of (1) "Yes...and," (2) go with your gut, and (3) make everyone in the group look good. *See How to Think Faster, Better on Your Feet*, CNN.COM (Aug. 12, 2008), http://www.cnn.com/2008/LIVING/08/12/rs.how.to.think.on.feet/index.html.

161. Stacy DeZutter, *Professional Improvisation and Teacher Education: Opening the Conversation*, *in* STRUCTURE AND IMPROVISATION IN CREATIVE TEACHING 34 (R. Keith Sawyer ed., 2011).

162. *Id.*

setting, character, and conflict, should become clearly defined as the performance progresses, and scenes should be steadily 'advanced,' meaning that new information and events should be added with each turn of dialogue."[163]

- *Truthfulness*. "No matter how outrageous things may get, scenes should still be 'honest' or 'truthful[.]'"[164]

These observations ring true for the cyberlaw simulations. Although I did not start using simulations with improv theory in mind, it quickly became apparent that such techniques were essential to running effective simulations. Rather than constructing every aspect of the simulations ex ante, each year I started the simulation with a broad idea of the major points of plot and law. Initial defendant websites were simple and ambiguous. The details were filled in later as student responses provided me with reflective guideposts for the level of detail needed in order to make the simulations effective.

Even with variants, the basic plot has remained similar each year. Our client is upset because somebody is running a website that taunts our client. Later it turns out that the defendant may be a cybersquatter or typosquatter who uses a domain name containing our client's trademark or a close variant. As the students study trademark and cybersquatting law, the defendant's conduct expands, and the defendant starts adding our client's trademarks to the defendant's source code. I include hidden words in two ways. First, I bury multiple instances of the client's trademarks in invisible text that can be seen only if one highlights the text or prints out the document.[165] Second, I bury multiple client marks in meta-tags.[166] This conduct adds issues regarding trademark infringement and dilution.[167]

In case the students start to get too comfortable in believing that the defendant is clearly liable, the defendant's site later adds indicia

163. *Id.*

164. *Id.*

165. One can use the HTML coding of a webpage to insert text in a background color that normally cannot be seen. For example, on a webpage with a white background, one can define the text color as white. Such buried text can only been seen if one "selects" the entire page, such as a "click and drag," or prints out the page. *See* Nathenson, *Infoglut*, *supra* note 113, at 62.

166. Meta-tags are HTML codes used to include various forms of metadata. "Keyword" meta-tags include indexing information that search engines may use in indexing the website. "Description" meta-tags contain a short description of the page or site. *See id.* at 62-63.

167. *See* 15 U.S.C. § 1114(1)(a) (2006) (infringement of registered trademark); *id.* § 1125(a)(1) (false designation of origin); *id.* § 1125(c) (trademark dilution); *id.* § 1125(d) (cybersquatting); *see also* Brookfield Commc'ns., Inc. v. W. Coast Entm't Corp., 174 F.3d 1036 (9th Cir. 1999) (discussing trademark infringement via meta-tags).

of possible fair use, such as commentary about our client and disclaimers. Even later, when the students might start to conclude the opposite—that the defendant is not liable—the defendant starts selling goods bearing the client's marks through an e-commerce site. Even then, the goods may or may not be infringing, adding additional issues. By this point, students will have done intensive fact-finding, cease-and-desist work, researching law of direct and indirect liability, and putting together case files geared towards the defendant (direct liability) and its service providers (usually secondary liability).

Within this basic plot, the details have varied considerably, each year taking the basic tools of the simulations—the IPHATTITUDES/Z domains—and treating them in fresh ways. For example, in 2009, the client was the International Project on Human Attitudes (at IPHATTITUDES.COM), an organization dedicated to "bettering the human condition."[168] The defendant (at IPHATTITUDEZ.COM), posted a copycat site—raising trademark and copyright issues—where it requested donations to be sent to the evocatively named, and professor-owned, email address of "gotbillstopay@gmail.com."[169] The defendant later changed its site to a blog format in which it claimed that our client had bilked him out of $1000 for never-received exercise equipment.[170] His blog included a poll that raised issues of defamation and immunity under the CDA, as well as fictional third-party comments that raised issues of hacking liability.[171] The site further included a link to an e-commerce store selling goods bearing the client's trademark, giving rise to issues of intermediary liability.[172]

In 2010, the client was I-P/H Attitudez, a shoe manufacturer (at the IPHATTITUDEZ.COM domain).[173] The defendant started a site at IPHATTITUDES.COM that taunted the client and later claimed that the client's shoes made him lose a track meet and scholarship.[174] The

168. *See What We Do*, INTERNATIONAL PROJECT ON HUMAN ATTITUDES, http://iphattitudes.com/2009/index-1.html (last visited Mar. 20, 2012).

169. *See* INTERNATIONAL PROJECT ON HUMAN ATTITUDES, http://iphattitudez.com/2009/pre-blog/09-27-2009/ (last visited Mar. 3, 2012).

170. *See Send me dirt on IPH Attitudes & Hutz*, THE LAWFUL, AWFUL IPH ATTITUDES STINKS SO I GOTTA GRIPE SITE (Oct. 4, 2009), http://iphattitudez.com/2009/?p=3.

171. *See id.*

172. *See id.* (stating "Help me out in my legal dispute against Iphattitudes.com. Go to my online store here. The Phat Attitude Dude says thanks!").

173. *See* I-P/H ATTITUDEZ: SHOOZ FOR GENERATION Z, http://iphattitudez.com/2010/ (last visited May 6, 2012).

174. *See* Phat Ari says "You can't touch this!", IPHATTITUDES.COM, http://iphattitudes.com/2010/pre-blog/index_2010-09-25.htm (last visited Mar. 21, 2012). As the

defendant later started a copycat site where he made minor adjustments that might or might not have been commentary, raising issues of copyright and fair use.[175] Once again, the blog's comments and poll gave rise to issues of defamation and hacking.[176]

In 2011, the client was a health advice organization, the Internet Project for Chronic Hypochondriasis Attitude Adjustment (at the IPHATTITUDES.COM domain).[177] Similar issues arose with the site of the defendant, which culminated in a copycat blog at IPHATTITUDEZ.COM that gave rise to issues of copyright infringement, trademark infringement, e-commerce abuse, and more.[178] As is apparent from the examples above, the acronym IPH, when combined with the word "ATTITUDES," permits a broad array of fact patterns. Even then, the plotlines above are tremendously abbreviated, and the reader is invited to view a complete archive of simulation sites run by the author.[179]

3. Projects

Upon the introduction of the simulations, students started work on the first of their three cyberlaw projects. Each subsection addresses the project background, the work product required, and the teaching methodology. Project 1 was a cybersquatting project, and served as the heart of everything to follow. Project 2 focused on intermediary liability. Project 3 required students to select a cyberlaw topic and

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defendant claimed, in homage to Rapper M.C. Hammer:

> U can't touch this!
> My-my-my-my, I lost the meet, my funds, that didn't feel so sweet.
> Thank you for messing Phatz with a race to run and two flat feet.
> It didn't feel so good to trip on my pants and fall right down,
> This unemployed old rapping school dog from an Alaskan town.
> U may be Big and Bad and Sad and known as the Bossman Hutz,
> But this is a legal eagle gripe site lawyerz just can't touch.

Id.

175. *See* I.P.H. SUCKS DOT COM, http://iphattitudes.com/2010/ (last visited Jan. 8, 2012) (2010 defendant blog).

176. *See* Ari, *Got any dirt on IPH Attitudez?*, I.P.H. SUCKS DOT COM (Oct. 6, 2010), http://iphattitudes.com/2010/?p=99 (2010 defendant blog).

177. *See* INTERNET PROJECT FOR CHRONIC HYPOCHONDRIASIS ATTITUDE ADJUSTMENT, http://iphattitudes.com/ (last visited May 6, 2012) (client site).

178. *See* INTERNET PROJECT FOR CHRONIC HYPOCHONDRIASIS ATTITUDE ADJUSTMENT, http://iphattitudez.com/ (last visited May 6, 2012) (defendant site).

179. *See Archive of Cyberskills sites*, IRA STEVEN NATHENSON, http://nathenson.org/courses/cyberlawskills/cyberskills-archives/ (last visited Jan. 7, 2012). At some point after publication of this Article, the 2011 sites will be moved and archived, and updated links will be available through this archive.

create a short, informational "client alert" and to give a presentation to our "law firm."

a. Project 1—Cybersquatting

i. Background

Domain name disputes are common and provide the opportunity to study the basics of Internet architecture. Domain name enforcement work is typical work for real-world attorneys, and includes investigating infringement, building a case file, sending cease-and-desist letters, and drafting civil or arbitration complaints. Thus, not only was the project useful for learning cyberlaw doctrine, but it was also a useful exercise in what real lawyers might do in the context of cyberlaw enforcement.

ii. Work product

Students were responsible for three main actions. The first was to investigate the online conduct, draft a cease-and-desist letter, and write the alleged infringer at one or more email addresses I approved. The second was for students to meet with me individually to discuss the progress of their actions. The third and most important component was to assemble a comprehensive and well-organized case file with:

- *Documentation.* All site documentation, including printouts, and records of domain ownership.
- *Correspondence.* All correspondence, including to and from the defendant, billing partner, client, and assigning partner.
- *Complaint.* Draft of complaint for a court, or for an arbitration panel under the Uniform Domain Name Dispute Resolution Policy ("UDRP").
- *Ethics memo.* A reflective "to-file" memo detailing the efforts taken to comply with relevant Rules of Professional Conduct, detailing any student-specific ethics or values dilemmas encountered during the enforcement.
- *Source list & copies.* A listing of sources on which the student relied, such as any briefs, complaints, or cease-and-desist letters used as a basis for drafting.
- *Timesheet.* A timesheet indicating matter worked on, work conducted, and time spent.[180]

180. I cautioned students that I would not be impressed by padded time, noting that in the

- *Other.* Any other relevant information the student chose to include.[181]

In the end, students presented healthy binders or folders filled with draft complaints, correspondence, documentation, source lists, and time sheets. Some students went beyond express requirements, choosing to write client memoranda.

iii. Methodology

When Project 1 started, students had not yet read enough law to solve the problem. Indeed, their reactions were typical: *How are we going to do this? We don't know anything about the law. How do we figure out who to contact or what to do?* This was the reaction that I was hoping for.[182] I have yet to meet a practitioner who knows everything they need to know. The typical starting point in practice is not necessarily knowing the answer to a question, but knowing the right questions to ask and how to seek the answers. Of course, with a classroom filled with students mostly unfamiliar with cyberlaw, I had to supply enough of the basics for them to start. We read materials on trademark law, cybersquatting, meta-tags, disclaimers, gripe sites, and fair use. We also read the UDRP and associated rules.[183]

In the meantime, students were instructed to consider enforcement strategies, to document everything, and to start creating a case file. We spent class time on "how to" topics, such as how to find contact information for domain name registrants through WHOIS

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real world, a supervisor may get annoyed if attorneys spend undue amounts of time on something, as the time may have to be written off, leading to unbilled time.

181. *See* Ferber, *supra* note 3, at 427 (noting required contents of case file, including matters similar to those noted in main text, with the addition of documents such as a journal and a bill).

182. *See id.* at 424 (noting value of giving students bare-bones instructions).

183. *See UDRP Policy*, *supra* note 106. Students were also assigned other UDRP-related readings, including the rules and supplemental rules for the UDRP and a model complaint. *See Rules for Uniform Domain Name Dispute Resolution Policy (the "Rules")*, INTERNATIONAL CORPORATION FOR ASSIGNED NAMES AND NUMBERS (Oct. 30, 2009), http://www.icann.org/en/dndr/udrp/uniform-rules.htm [hereinafter *UDRP Rules*]; *Supplemental Rules for Uniform Domain Name Dispute Resolution Policy*, WORLD INTELLECTUAL PROPERTY ORGANIZATION, http://www.wipo.int/amc/en/domains/supplemental/eudrp/ (last visited Mar. 20, 2012) [hereinafter *Supplemental UDRP Rules*]; *eUDRP Model Complaint and Filing Guidelines*, WORLD INTELLECTUAL PROPERTY ORGANIZATION, http://www.wipo.int/amc/en/domains/complainant/ (last visited Mar. 20, 2012); Complaint Transmittal Coversheet & WIPO eUDRP Model Complaint, WORLD INTELLECTUAL PROPERTY ORGANIZATION, http://www.wipo.int/export/sites/www/amc/en/docs/complaint-eudrp.doc (last visited Mar. 20, 2012).

searches. The WHOIS database provides an easy way of determining registration and contact information of record for domain names. We also spent time discussing how to document online conduct. Online documentation is always challenging for students. Although many students initially opt to print out webpages, such documentation may be inadequate. In case of meta-tag abuse—where the website stuffs invisible trademarks or other terms into the coding of the webpage—a normal printout will not show the underlying source code. Moreover, printouts often fail to capture the look and feel of a website. Thus, we discussed how to access and document website HTML code and how to use screen capture tools to capture the browser images from the computer screen.[184] Such activities were useful in many ways. First, this allowed students to understand more deeply the interplay between law and technology. Second, it made them consider the interplay between law and facts, forcing them to think about how to obtain the documentation necessary to proving their legal claims.

Further, I changed the defendant's site regularly. I wanted the students to realize that—just like the real world—they couldn't sit still. Attorneys should document online activities when they are first found: if you don't document something when you see it, it might soon change or vanish. Frequent changes also helped to add facts and issues, and to expand or contract the simulation's difficulty as needed.

Later, students were instructed to draft cease-and-desist letters and to email them to the defendant in an attempt to negotiate a resolution to the cybersquatting scenario. In drafting, students were strongly encouraged to look at examples of cease-and-desist letters contained in the *Chilling Effects Clearinghouse*.[185] After drafting the letters, students were instructed to transmit the letters to approved email addresses belonging to the defendant, (i.e., to the professor). In the real world, I would never permit an untrained junior lawyer to send unreviewed demands to an opposing party or opposing counsel. However, the realities of the project—including the number of students and keeping pace with the syllabus—dictated that the students send their letters directly to the defendant without an initial supervisory review.[186] Moreover, part of the teaching methodology

184. Other issues we discussed were authentication of evidentiary materials as well as the extent to which it may be advisable to have evidence gathered by someone other than the attorney prosecuting the matter. *See* FED. R. EVID. 901 (requirement of authentication); MODEL RULES OF PROF'L CONDUCT R. 3.7 (advocate shall not generally be witness at trial).

185. CHILLING EFFECTS, http://www.chillingeffects.org (last visited Mar. 9, 2012).

186. I made it clear to the students that in practice, junior lawyers should not normally send out such letters without proper review by a more experienced attorney.

was to utilize any shortcomings in student letters—such as questionable tactics or errors in facts, law, or even spelling—as teaching opportunities. Had I edited the students' letters before permitting their transmittal, I would have substituted the students' judgment with my own, denying them and the class with valuable learning moments. In this regard, Cybersimulations represent a huge qualitative difference from clinics, where the supervising instructor must take care to protect the client from student errors.

As noted, the role-plays were self-contained, and any replies from the adverse party were written solely by me. Because I responded to student cease-and-desist letters in role as the adverse party, I was able to tailor responses individually to students. This allowed each student to have a slightly different experience, permitting additional issues for classroom discussion, and requiring each student to think through his or her role-playing scenario and case file individually. My responses varied significantly in substance, tone, and tactic. Generally speaking, I used any error of fact, law, or tactic in the cease-and-desist letters as springboards for delay or obfuscation.[187] Other responses included:

- *Delay and misdirection.* Promising to comply at some future date; refusing to comply; denying or admitting that I was aware of the plaintiff's mark; asking the sender if his or her client would like to go into business with me; claiming that I couldn't load attached files; and saying that I had a lawyer while refusing to provide the lawyer's contact information.[188]
- *Bad faith and threats.* Offering to sell the domain for sums from the trivial to the exorbitant; threatening to register additional domain names incorporating the client's or law

187. The reason for this is obvious but bears mention. There is no excuse in any correspondence for errors of spelling, grammar, facts, or law. Not only do such errors make the lawyer look bad, but they can have grave consequences for the lawyer and his or her client. Thus, if a student misstated the name of the trademark, or incorrectly cited a statutory provision, I would respond in kind, pointing out that I had registered a domain name *different* from the trademark, or that the cited statutory provision had *no* bearing to my conduct. In the real world, such errors could at the very least give an opposing party excuses for delay, and at worst, could prejudice an otherwise meritorious claim.

188. DOCX is a file format for recent versions of Microsoft Word. ODT is a format used for OpenDocument format. RTF is an older format used by Windows machines. Thus, if a student would send an attachment in the new version of Microsoft Word (which uses a DOCX rather than DOC extension), I would delay matters by writing back that I couldn't load the file. Clearly, I knew how to load a DOCX file, but this raised the practical issue of making sure that the recipient of a communication is able to load any attachments.

firm's names, such as SUCKS.COM sites; threatening to report the sender to the State bar; and accusing the other side of infringing my own rights or of "reverse domain-name hijacking."[189]

- *Claims of fair conduct.* Offering to use, or relying on, a disclaimer; claiming that I was running a gripe site or making protected speech; claiming that my rights to use the domain name arose before any competing rights; and saying that the disputed domain referred to my nickname as the "Phat Attitude Dude."
- *Ethical quandaries.* Saying that I had a lawyer to see if the sender would continue discussions; asking for clarification or legal advice; asking whether the senders were lawyers when the cease-and-desists failed to identify the senders; saying that I was a child, parent, or other relative; and leveraging any arguably improper conduct of the senders into a threat to report them to their State bars.[190]
- *Opposing counsel.* Responding as a defense lawyer who: misstates law or fact, points out the sender's errors of law or fact, threatens to report the sender to the State bar for ethical violations, or threatens to file suit against the sender and its client for RICO, wire fraud, or other alleged violations.[191]

From the list above, it should be no surprise that in four years of Cybersimulations, the defendant has not once complied with any demand. After initial exchanges, most students sent follow-ups,[192] and I continued to respond as warranted. Circumstances of individual cease-and-desist letters and my responses were used for general classroom discussion.[193] The students typically became emotionally

189. *See UDRP Rules*, *supra* note 183, ¶ 1 ("Reverse Domain Name Hijacking means using the Policy in bad faith to attempt to deprive a registered domain-name holder of a domain name.") (emphasis removed).

190. In fact, on a few occasions, I wrote the enforcing "attorney" *before* she or he sent an initial demand. The ostensible excuse for the preemptive strike would be that "Ari" had found the attorney on the firm's website, and was seeking to secure representation in advance of a likely dispute. This gave rise to additional interesting issues, foreshadowing the conflicts scenarios found in Project 2.

191. Cease-and-desist letters and responses are on file with the author. In order to protect student privacy, individual student responses are discussed only in general terms.

192. Some sent many follow-ups, giving rise to classroom discussion of negotiation techniques. How many times should one make offers or demands before one's position becomes weakened?

193. *See infra* Part IV.C.1.

engaged in the enforcement, and sometimes outraged at the gamesmanship of their opponent (especially at the opposing counsel). Such emotional intensity was a valuable learning tool, motivating students to excel in their enforcement projects.[194]

After the initial round of cease-and-desist letters, I met individually with the students in "partner meetings" to review the progress of their enforcement and their tentative client recommendations. The meetings generally had two informal components: me wearing my hat as "managing partner," and me as professor. Most students took the meetings extremely seriously and came well-prepared, more than a few in professional attire. During the meetings we discussed what might be the best remedies to meet the client's needs, as well as ways of managing client expectations. The meetings also served as a way for students to seek clarification on any issues on which they felt uncertain. In sum, it was much like one would expect of junior lawyers in the real world: they go out, do the research, compile the case file, and come back to the supervising attorney to discuss options.

Finally, students were instructed to assemble their case files, including correspondence, complaint, ethics memo, sources, and timesheet, as noted previously. Regarding the complaint, students were generally instructed to draft a complaint pursuant to the UDRP, a domain name arbitration procedure that is inexpensive and quick.[195] A complaint filed pursuant to the UDRP is tantamount to filing a court complaint and seeking relief in one step. Complainants are generally permitted only their opening complaint, and respondents only their answer. Although the remedies available under the UDRP are limited solely to cancellation or transfer of the subject domain name,[196] the proceeding provides an excellent vehicle for the assembly of arguments, preemptive counterarguments, and supporting exhibits. In short, the goal is to draft a cogent and well-written example of persuasive legal writing, supported by an organized case file with documentation, all of which might be used by a colleague or reviewed by a supervising attorney.

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194. *See* BEST PRACTICES, *supra* note 4, at 35 (noting that "[e]xperiential teaching . . . values feelings as much as thinking," in contrast with the Socratic method, which "treats feelings as irrelevant").

195. *See UDRP Policy*, *supra* note 106.

196. *Compare* 15 U.S.C. § 1117(a) (2006) (trademark damages) *and id.* § 1117(d) (statutory damages of up to $100,000 per domain name for cybersquatting), *with UDRP Policy*, *supra* note 106, ¶ 4(i) (remedies limited to cancellation or transfer domain name).

b. Project 2—Intermediaries

i. Background

Project 2 used, and built upon, the websites used for Project 1. While we awaited the "decision" from the UDRP arbitrator, the defendant accelerated the infringement, sometimes creating a copycat site that mirrored the client's site, even linking to a new e-commerce site where the defendant used providers such as CafePress.com to provide goods bearing the client's trademarks. The defendant also created a blog, inviting comments from "third parties" created by the instructor. The defendant's blog, along with the third-party comments, tended to include content defamatory of the firm's client and its employees.

Frustrated with the defendant's intractability, our client would ask us if we can obtain relief from someone other than the domain name owner. Accordingly, whereas Project 1 focused on the alleged cybersquatting of the domain-name owner, Project 2 focused on the potential liability of Internet intermediaries under the law of copyright, trademark, and defamation. This required going beyond Ari/Ariel to consider intermediaries, namely Internet Service Providers ("ISPs") such as Verizon, AT&T, or HostGator, who provide Internet connection or hosting services, as well as Online Service Providers ("OSPs"), who provide other online services, such as YouTube, Flickr, or CafePress. Since the "infringement" was fictional, any liability was also fictional.

ii. Work product

For this project, students were instructed to select from a short laundry list of topics:

- *Defamation and Communications Decency Act.* Determining whether any ISPs or OSPs benefit from immunity from defamation liability under Section 230 of the Communications Decency Act.
- *DMCA takedown notifications.* Determining whether the law would justify a DMCA takedown notice seeking removal of Ari's entire website, or whether copyright's fair use doctrine would limit the material for which removal might be sought.
- *Intermediary trademark liability.* Determining whether an online e-commerce provider may be liable for direct or secondary trademark infringement for manufacturing and

selling products through an e-commerce webpage hosted by the OSP on behalf of Ari.

- *DMCA counter-notifications*. This topic required a bit of history revision, instructing the student that she or he left our law firm several years earlier and now worked for the "Electronic Freedom Foundation," a fictional organization devoted to free speech and digital rights. The student must then represent Ari, whose entire site was removed pursuant to a DMCA takedown notice, and determine whether his/her site can be restored via DMCA put-back notice.

At this point in the term, my workload tended to be significant because I was usually scoring Project 1.[197] Therefore, students put together case files, but did not transmit their notices and letters via email. Indeed, as these letters were drafted with specific real-world ISPs in mind, students were *not* to transmit them, but rather to simply hand the drafts in to me. The case file needed to include:

- *Relevant factual documentation*. The relevant documentation varied by topic, including materials such as: conflicts checks, website printouts, WHOIS records, service provider policies and contact information, Copyright Office records of DMCA agents, and trace-route and network lookup research.
- *Memorandum of law for client*. A memorandum written for the client that objectively analyzed the legal and factual issues at hand for the assignment.
- *Draft letter(s) or notifications to intermediaries seeking compliance*. For the DMCA topics, students needed to draft statutory takedown or put-back notices seeking compliance. In scenarios where DMCA notice was not possible, they were asked to draft letters demanding or requesting compliance.
- *Memo-to-file on conflict concerns*. Because client conflicts provided the ethics component of Project 2, students were asked to write a short, reflective "memo-to-file" discussing conflicts-related issues pursuant to the ethics rules.
- *Source list & copies*. A listing of sources on which the student relied, such as any takedown or put-back notices used as a basis for drafting.

197. The time required to score each case file varied between two and five hours per file. As is oftentimes the case, the better the work product, the easier it was to score.

- *Other.* Any other relevant information.

iii. Methodology

Our studies in class focused on two main areas. The first was learning how to conduct the necessary due diligence and factual determinations in identifying the relevant service providers, documenting their status, and investigating ancillary matters. For example, we would look at the domain name WHOIS records, which list the ISP hosting the online content for any particular domain name. We also used other Internet tools aimed at confirming the identity of any responsible ISP.[198] In addition, we examined the records of the United States Copyright Office, which maintains a directory of Designated Agents for takedown notices.[199] Students were responsible for going to the websites of all identified ISPs and OSPs to document and review the providers' infringement policies, abuse policies, and takedown policies, if any. Students were again encouraged to peruse the *Chilling Effects* database for helpful examples of DMCA takedown notices, put-back notices, and more.

In many ways, teaching the materials for Project 2 was much simpler than for Project 1. We read materials on copyright law, fair use, and takedowns under the DMCA.[200] Of particular interest was the DMCA's notice-and-takedown regime, which permits copyright owners to send takedown notices to ISPs; if the ISP promptly removes the disputed content, it earns a "safe harbor" against monetary copyright liability.[201] We also considered secondary trademark liability, a matter that is not covered by the DMCA or statutes.[202] We further recalled our readings on the CDA, which can render service providers immune from defamation liability.[203]

198. *See* NETWORK-TOOLS.COM, http://network-tools.com/ (last visited Sept. 6, 2011).

199. *Online Service Providers*, UNITED STATES COPYRIGHT OFFICE, http://www.copyright.gov/onlinesp/ (last visited Jan. 8, 2012).

200. 17 U.S.C. § 512 (2006). One significant case utilized was *Lenz v. Universal Music Corp.*, 572 F. Supp. 2d 1150, 1154-55 (N.D. Cal. 2008) (holding that complaint stated a claim for material misrepresentation in Universal's takedown notice).

201. *See* 17 U.S.C. § 512(c).

202. Cases addressing secondary trademark liability include *Tiffany (N.J), Inc. v. eBay, Inc.*, 600 F.3d 93, 110 (2d Cir. 2010) (holding that eBay was not contributorily liable for trademark infringement of users), *cert. denied*, 131 S. Ct. 647 (2010) and *Gucci Am., Inc. v. Hall & Assocs.*, 135 F. Supp. 2d 409, 413 (S.D.N.Y. 2001) (Internet Service Provider potentially liable for contributory trademark infringement).

203. 47 U.S.C. § 230(c) (2006). Corresponding baseline readings included, e.g., *Zeran v. Am. Online, Inc.*, 129 F.3d 327 (4th Cir. 1997) (holding that AOL was immune from defamation liability).

c. *Project 3—Client Alert*

i. Background

The final cyberlaw project was a "client alert" on a cyberlaw subject selected by the student subject to instructor approval, done in conjunction with a presentation to the class. A client alert is a short informational bulletin published by lawyers, written with an eye towards educating the public and possibly obtaining clients.[204] In one sense, the project served as a "lite" seminar paper, but with its shorter length and informational tone, tended more towards the descriptive than the normative. In another sense, Project 3 was a safety valve: since the "Law of the Horse" covers many topics, and since I was highly selective in which topics to emphasize, Project 3 provided a way for the students to flesh out the course with topics of interest to them.[205] I guided students on selecting topics, and where necessary, on narrowing their topics.

From a skills standpoint, this was the least skills-oriented of the three projects. Nevertheless, skills and professionalism arose here as well. Client alerts or similarly named publications are done by law firms as a way of promoting the firms and their attorneys. Junior lawyers are often tapped to do such projects either as co-authors or as ghost authors for more senior attorneys. Doing such projects keeps attorneys on the cutting edge and is an important component of satisfying the ongoing duty of competence. Junior lawyers in a practice group are also expected to demonstrate their public speaking ability to their practice group, and later, to give presentations at CLEs.

ii. Work Product

Students were required to select a specific cyberlaw topic subject to the professor's approval. Examples include recent lawsuits, court decisions, changes to statutes or regulations, and new technology. After topic approval, students were required to provide me with reading materials to be assigned to the class, so that the class could learn about each topic. Each student was later required to give a "practice group" presentation on their topic to educate the rest of the class. The format of the presentation was similar to what one might

204. *See, e.g.*, *Client Alert*, GOODWIN PROCTER, http://www.goodwinprocter.com/Publications/Newsletters/Client-Alert.aspx (database of client alerts) (last visited Nov. 22, 2011).

205. Eric Goldman notes the difficulty of organizing a cyberlaw course, noting that some topics might be useful as end-of-semester "capstone topics." *See* Goldman, *supra* note 5, at 754.

expect to occur internally within a law firm practice group. Each student was required to bring a printed copy of their final draft of the client alert to the final day of class, to be shared with the rest of the class. The case file for Project 3 was required to include: the client alert; a memo-to-file on ensuring that the client alert did not inadvertently prompt readers to assume legal advice was being given; copies of assigned readings; and any other relevant materials.

iii. Methodology

Project 3 occupied the final weeks of the term. The beauty of this topic was that students got the first crack at selecting reading materials. This helped to lighten my load as I worked on project scoring and other matters. After students submitted readings (usually by providing a hyperlink or citation), I compiled a list of readings for each class. Each student also gave a short presentation, with time provided for questions. The last day of class we exchanged client alerts, providing a closing moment for the "practice group."

B. Integrating the Signature Pedagogies

As noted previously, the *Carnegie Report* suggests that legal education consists of a "signature pedagogy" containing four components: *doctrine* or so-called "black letter" law (i.e., the surface structure), the *theory* that forms the foundation of any grouping of materials (i.e., the deep structure), the often-ignored and always implied *values* taught or modeled by the instructor (the tacit structure), and the *skills* needed to effect professional mastery in the subject being taught (i.e., the shadow structure).[206] Compared to the case method, the differences in student engagement through Cybersimulations are dramatic in all four components. Under the case method, one might get the "moral of the story," just as one might learn a moral by reading *Little Red Riding Hood*.[207] A much better way of learning about surviving in the legal wilderness may be represented by commando training, which starts on base (similar to baseline development) and later moves into the field in a variety of rugged environments. Similarly, Cybersimulations inject the students into a broad variety of unfamiliar situations that force them to bring their knowledge, skills, values, and emotions into play, creating a

206. *See* CARNEGIE REPORT, *supra* note 4, at 24; *see also supra* Part II.C.2.

207. The moral in *Little Red Riding Hood*? Don't talk to strangers or they might try to eat you. *See* DIE GEBRÜDER GRIMM, *Rotkäppchen*, *in* KINDER- UND HAUSMÄRCHEN DER GEBRÜDER GRIMM 11 (W.H. Van Der Smissen, ed., 1885).

learning environment far more immersive than might ever be expected within the confines of a law school classroom.[208] The next three subsections address, in turn, theory/doctrine, skills, and values.

1. Bringing Theory and Doctrine Alive

It is one thing to discuss theory in the abstract. It is quite another to bring it alive by forcing students to grapple with ever-shifting online challenges using the technologies and networks addressed by those theories. Thus, the theoretical structures of cyberlaw, which students initially discussed during the "baseline" period,[209] were later understood during the simulations on a much deeper level than students might have learned through traditional pedagogy. For example, during the baseline period we discussed the conceptual difficulties of defining and regulating cyberspace, the nature of Internet architecture and how "code" serves as a regulator, and the differences between online actors. These theoretical strands formed an essential part of the vocabulary used in the simulations, as we were soon confronted with concrete problems arising from those very issues. For example, who should regulate domain names, American courts or arbitrators appointed pursuant to contractual relations under ICANN? How does the "code" of Internet pages—such as HTML, meta-tags, robots.txt files and more—serve as a regulator? If we choose to treat service providers differently than those posting online content, *why* should the providers be treated differently? Would social values be undercut by finding intermediary liability too cavalierly?

Regarding doctrine, students grappled with numerous legal issues in the context of realistic simulations, requiring them to do much more than legal analysis: students had to engage in problem solving, conduct investigation to learn the actors and facts relevant to the problem, and draft letters and complaints aimed towards satisfying the client and persuading the opponent.[210] The doctrinal topics covered in the simulations included:

- *Trademark.* Was Ari/Ariel liable for cybersquatting or other

208. As the *Carnegie Report* suggests, the intellectual/cognitive apprenticeship "is most at home in the university," but the apprenticeships of expert practice and identity/purpose may be better taught through experiential techniques such as participatory simulations. *See* CARNEGIE REPORT, *supra* note 4, at 28.

209. *See supra* Part IV.A.1.

210. In fact, *Best Practices* suggests that problem solving is the "central goal of legal education." BEST PRACTICES, *supra* note 4, at 62.

trademark laws?[211] Subsidiary issues included meta-tags,[212] disclaimers,[213] gripe sites,[214] trademark fair use,[215] and more. Could e-commerce providers be liable for providing custom-made goods?[216]

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211. *See* 15 U.S.C. § 1125(d) (2006); *see also* Panavision Int'l, L.P. v. Toeppen, 141 F.3d 1316, 1327 (9th Cir. 1998) (holding that defendant diluted plaintiff's trademark in PANAVISION by trying to sell plaintiff the PANAVISION.COM domain name).

212. *See* Nathenson, *Infoglut*, *supra* note 113 (analyzing meta-tag and keyword abuse in terms of trademark law and information science).

213. The relevance of a disclaimer can vary significantly. *See* Pebble Beach Co. v. Tour 18 I Ltd., 155 F.3d 526, 552 (5th Cir. 1998) (holding that "conspicuous disclaimers that disclaim affiliation may reduce or eliminate confusion"); Home Box Office, Inc. v. Showtime/The Movie Channel Inc., 832 F.2d 1311, 1315-17 (2d Cir. 1987) (stating that defendant would have "heavy burden" to produce evidence showing effectiveness of disclaimer in reducing likelihood of confusion); 4 MCCARTHY, *supra* note 137, § 23:51 ("Defendant's disclaimer stating that it is not connected with plaintiff may or may not prevent a finding of likely confusion, depending upon the facts."); Jacob Jacoby & George J. Szybillo, *Why Disclaimers Fail*, 84 TRADEMARK REP. 224, 224 (1994) ("Although relied on to defend charges of likelihood of confusion, most disclaimers do not in fact eliminate the potential for confusion."). From a teaching perspective, disclaimers are wonderful tools that permit all kinds of creative argumentation on the part of the students. *See also* Planned Parenthood Fed. of Am., Inc. v. Bucci, 42 U.S.P.Q.2d 1430 (S.D.N.Y. 1997) (disclaimer ineffective in remedying improper use of domain name), *aff'd*, No. 97-7492, 1998 U.S. App. LEXIS 22179 (2d Cir. Feb. 9, 1998); KU & LIPTON, *supra* note 6, at 280, 327 (excerpting *Planned Parenthood*).

214. *See, e.g.*, Lamparello v. Falwell, 420 F.3d 309, 315 n.3 (4th Cir. 2005) ("[W]hile a gripe site, or a website dedicated to criticism of the markholder, will seldom create a likelihood of confusion, a website purporting to be the official site of the markholder and, for example, articulating positions that could plausibly have come from the markholder may well create a likelihood of confusion."); Taubman Co. v. Webfeats, 319 F.3d 770, 778 (6th Cir. 2003) ("no possibility of confusion" created by use of "taubmansucks.com"); Sunlight Saunas, Inc. v. Sundance Sauna, Inc., 427 F. Supp. 2d 1032, 1064-65 (D. Kan. 2006) (use of "exposed" in "sunlightsaunas-exposed.com" not as unequivocal as "sucks," leaving factual questions regarding confusing similarity); Bally Total Fitness Holding Corp. v. Faber, 29 F. Supp. 2d 1161, 1163-66 (C.D. Cal. 1998) (no likelihood of confusion arising from site of consumer titled "Bally Sucks"); *Planned Parenthood*, 42 U.S.P.Q.2d at 1440 (use of "plannedparenthood.com" was as a source identifier and not communicative); *see also* KU & LIPTON, *supra* note 6, at 327-36 (including excerpts from *Bally* and *Planned Parenthood*).

215. There are a myriad of trademark fair-use defenses. *See* 15 U.S.C. § 1115(b)(4) (2006) (statutory descriptive fair-use defense); *id.* § 1125(c)(3)(A) (2006) (nominative and descriptive fair-use defenses to dilution); KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc., 543 U.S. 111, 117-124 (2004) (discussing statutory descriptive fair use defense); Prestonettes, Inc. v. Coty, 264 U.S. 359, 368 (1924) (truthful, non-deceptive use not infringement); Century 21 Real Estate Corp. v. Lendingtree, Inc., 425 F.3d 211, 228-31 (3d Cir. 2005) (adopting modified nominative fair use affirmative defense); Mattel, Inc. v. MCA Records, Inc., 296 F.3d 894, 900-02 (9th Cir. 2002) (parody); New Kids on the Block v. News Am. Publ'g, Inc., 971 F.2d 302, 308 (9th Cir. 1992) (distinguishing classic fair use and new "nominative" fair use defense); *see generally* Graeme B. Dinwoodie, *Developing Defenses in Trademark Law*, 13 LEWIS & CLARK L. REV. 99 (2009).

216. *See* Tiffany (NJ), Inc. v. eBay, Inc., 600 F.3d 93, 96, 103, 110 (2d Cir. 2010) (holding that eBay was not a direct infringer or contributorily liable for trademark infringement of users), *cert. denied*, 131 S. Ct. 647 (2010); Gucci Am., Inc. v. Hall & Assocs., 135 F. Supp. 2d 409,

- *Copyright.* Was Ari/Ariel's site infringing or fair use?[217] Would a takedown notice or put-back notice be appropriate?[218] Could any service provider be liable for copyright?[219]
- *Defamation.* Was Ari/Ariel's site defamatory? If so, who would be liable for primary content? Would Ari/Ariel be liable for defamatory user comments?[220] Would any service provider be liable?[221]
- *Anonymity.* What are the legal protections for anonymity, and what methods might be used to strip away Internet anonymity?[222]
- *Jurisdiction and procedure.* If there was potential for a lawsuit, where might it be filed?[223] What are the procedures attendant to a civil or UDRP complaint?[224]

Many additional issues were covered in other parts of the course,

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413 (S.D.N.Y. 2001) (Internet Service Provider potentially liable for contributory trademark infringement).

217. *See* 17 U.S.C. § 107 (2006); Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 581 (1994) (noting that "parody may or may not be fair use").

218. *See* 17 U.S.C. § 512(c) (2006) (copyright safe harbor for service providers); *id.* § 512(c)(3) (takedown notification); *id.* § 512(g)(3) (counter-notifications).

219. *See* Religious Tech. Ctr. v. Netcom On-Line Commc'n Servs., Inc., 907 F. Supp. 1361, 1372-77 (N.D. Cal. 1995) (service provider not directly liable but can be contributorily or vicariously liable); *see also* 17 U.S.C. § 501 (2006) (copyright infringement); *id.* § 512(c) (safe harbors from all forms of copyright infringement liability for certain hosted materials); *see also* KU & LIPTON, *supra* note 6, at 375-82 (including excerpts from the *Netcom* case).

220. *See* Stratton Oakmont, Inc. v. Prodigy Servs. Co., No. 31063/94, 1995 WL 323710, at *3 (N.Y. Sup. Ct. May 24, 1995) (finding that "PRODIGY exercised sufficient editorial control over its computer bulletin boards to render it a publisher with the same responsibilities as a newspaper"), *rearg. denied*, 1995 WL 805178 (Dec. 11, 1995); Cubby, Inc. v. CompuServe, Inc., 776 F. Supp. 135 (S.D.N.Y. 1991) (holding that CompuServe was distributor rather than publisher of defamatory materials and is therefore not liable without proof of knowledge or reason to know of the defamatory statements); *see also* KU & LIPTON, *supra* note 6, at 234-41 (including excerpts from *Stratton* and *Prodigy* cases).

221. *See* Fair Hous. Council of San Fernando Valley v. Roommates.com, LLC, 521 F.3d 1157, 1165-67 (9th Cir. 2008) (service provider did not obtain CDA immunity for illegal drop-down menus it required users to select from); *see also* KU & LIPTON, *supra* note 6, at 254-61 (including excerpt from *Roommates.com*).

222. *See, e.g.*, 17 U.S.C. § 512(h) (2006) (DMCA subpoenas).

223. *See, e.g.*, Panavision Int'l, L.P. v. Toeppen, 141 F.3d 1316, 1321-22 (9th Cir. 1998) (using effects test to find purposeful availment by cybersquatter); Zippo Mfg. Co. v. Zippo Dot Com, Inc., 952 F. Supp. 1119, 1124 (W.D. Pa. 1997) (using "sliding-scale" test to measure personal jurisdiction); *see also* KU & LIPTON, *supra* note 6, at 39-45 (including excerpt from *Zippo*).

224. *See UDRP Policy*, *supra* note 106; *see also supra* note 183 (citing *UDRP Rules*, *Supplemental UDRP Rules*, and other relevant procedural materials).

either during the baseline period, or later on, such as free speech, state regulation, P2P file-sharing, privacy, hacking, Internet crime, and more. However, a core principle of the Cybersimulations was to "pick and choose" the topics for deeper development. Indeed, to the extent that cyberlaw, at the surface level, might be a "Law of the Horse," this doctrinal "flaw" turns lemons into lemonade: the instructor can and must choose the topics meriting greater examination. Such issues can then serve as centerpieces for the simulations, and as a result, lead to much deeper coverage of knowledge, skills, and values for those issues than might occur in a "breadth-over-depth" course taught through the traditional case method.

By example, it is one thing to read meta-tag cases such as *Brookfield Communications v. West Coast Entertainment*[225] or *Playboy Enterprises v. Welles*[226] and discuss trademark infringement and fair use in the abstract. It is quite another to pull up the meta-tags of the subject pages from the Internet Archive and scrutinize the source code of the disputed websites, all with an eye towards understanding how meta-tag codes work and how to analyze similar code on a live website.[227] Similarly, one could read *Lenz v. Universal Music Corp.*[228] as an illustration of liabilities that may arise from alleged abuse of the DMCA notice-and-takedown procedure. Alternatively, one could use *Lenz* as a cautionary note to students who are contemporaneously drafting takedown and put-back notices based on live websites that may or may not be infringing. I submit that one of the best ways to learn the law, ethics, and dangers attendant to the process of drafting a DMCA takedown notice is to study the law, roll up your sleeves, and draft based on a realistic dispute, knowing that your managing partner will be critically evaluating your work product with an eye towards whether the notice might expose you or your

225. 174 F.3d 1036 (9th Cir. 1999). *Brookfield* involved a suit over the mark MOVIEBUFF. *See id.* at 1041-44. The plaintiff moved for a temporary restraining order preventing the defendant from using the disputed mark in buried text or the meta-tags of its site. *See id.* at 1043.

226. 279 F.3d 796 (9th Cir. 2002). *Welles* involved a dispute between Playboy Magazine and a former Playmate of the Year who ran a website where she used marks such as PLAYBOY and PLAYMATE in her meta-tag source code. *See id.* at 799-800.

227. For archives of the sites in *Brookfield* and *Welles*, see *@moviebuff.com | The Movie Buff's Movie Store Online!*, INTERNET ARCHIVE WAYBACK MACHINE, *available at* http://web.archive.org/web/19990128085240/http://www.westcoastvideo.com/ (last visited Apr. 18, 2012); *Terri Welles: Playmate of the Year, 1981*, INTERNET ARCHIVE WAYBACK MACHINE, *available at* http://web.archive.org/web/19980115083531/http://www.terriwelles.com/ (last visited Apr. 18, 2012).

228. 572 F. Supp. 2d 1150, 1154-55 (N.D. Cal. 2008) (holding that complaint stated a claim for material misrepresentation in Universal's takedown notice).

client to liability for a frivolous takedown.

2. Full set of *MacCrate* skills

A discussion of doctrine and theory is necessarily incomplete without considering their relationship to lawyering skills. The recommendations of the *MacCrate Report*, *Carnegie Report*, *Best Practices*, as well as the ABA's move towards outcomes education, are all premised in large part on the importance of lawyering skills.[229] Such skills are indeed important for the reasons discussed in those reports and in Part II.C. There is an additional reason: using lawyering skills to teach doctrine and theory helps to deepen the understanding of each. As noted immediately above,[230] the simulations permitted deep learning of otherwise complex legal doctrine. Specifically, the use of lawyering skills in the simulations—from fact-finding to negotiation to building case files and more—helped lead to a deeper understanding of doctrine and theory. The converse is also true. Deep learning of doctrine and theory also helped to foster a deeper appreciation of the lawyering skills specific to that context.[231] It is one thing to discuss in the abstract the importance of fact-finding and building a case file. It is quite another to require students to learn sufficient Internet architecture for them to document a website, including appearance, source code, and ownership, with an eye towards drafting a demand letter steeped in substantive law, and later to build a case file, complete with complaint, arguments, and exhibits. Such skills learning is holistic and highly immersive.

229. BEST PRACTICES, *supra* note 4, at 77; CARNEGIE REPORT, *supra* note 4, at 22; MACCRATE REPORT, *supra* note 4, at 135; *see also supra* note 41 and accompanying text.

230. *See supra* Part IV.B.1.

231. *See* CARNEGIE REPORT, *supra* note 4, at 25 (noting that expert knowledge is "related to contexts").

Table 1 provides a detailed listing of all ten *MacCrate* skills, and suggests how each of the three projects fostered the learning of detailed, immersive, and contextual lawyering skills.

TABLE 1. Lawyering Skills Learned in Cybersimulation

MacCrate Skill[232]	Project 1 (Cybersquatting)	Project 2 (Intermediaries)	Project 3 (Client alerts)
Problem-solving[233]	How to handle alleged cybersquatting.	Varies: whether a takedown notice or counter-notification is permitted under the law, how to draft a takedown notice or counter-notification, and when a service provider is immune from defamation or tort liability.	Drafting a client alert on a novel cyberlaw issue in compliance with ethical considerations, and giving an informative presentation to a practice group, as well as responding to questions.
Legal Analysis & Reasoning[234]	Discerning law: trademark, cybersquatting, and UDRP procedures; determining likelihood of success on the merits.	Determining the material facts from the myriad circumstances of the role-playing websites in light of relevant assignment, and determining likelihood of success on merits.	Determining the law relevant to the student's cyberlaw issue.
Legal Research[235]	Reading cases, statutes, and UDRP policies and rules.	Reading cases and statutes.	Finding, reviewing, and organizing materials relevant to the topic.
Factual Investigation[236]	Determining the ownership and content of an infringing website, and documenting ongoing and changing infringement.	Examining simulation for possibly unlawful activities, determining which service providers may be responsible, determining takedown and other relevant policies, and discerning contact information.	Will vary with the student's selected project.
Communication[237]	Writing the defendant to cease cybersquatting, and meeting with the "managing partner" to discuss cost-effective strategies for the client.	Drafting takedown notices, counter-notifications, or other communications for intermediaries seeking their cooperation.	Writing with "qualifiers" to avoid professional liability, as well as how to present the student's topic to the group as a whole.
Counseling[238]	Developing a cost-effective strategy for client needs, particularly for a client who may be unrealistic in its expectations of time, cost, and results.	Developing a cost-effective strategy for client needs.	Providing information that is useful, even if general, for existing or potential clients who might wish to engage the "firm's" services.
Negotiation[239]	Attempting to obtain compliance. This was done through the process of sending cease-and-desist letters and engaging in follow-up discourse.	Drafting correspondence seeking to obtain compliance from online intermediaries.	N/A
Litigation Procedures[240]	Drafting a civil or UDRP complaint.	Creating a paper trail that will enhance rather than prejudice possible litigation, and/or using out-of-court procedures such as DMCA takedowns to obtain intermediary compliance.	N/A
Organization and Management of Legal Work[241]	Building an organized case file and keeping accurate and descriptive time sheets.	Building an organized case file.	Building an organized project file.
Professionalism[242]	Truthfulness and honesty in dealing with third parties; dealing with represented adverse persons.	Conflicts of interest issues.	Avoiding reliance by third parties, inadvertent creation of attorney-client relationships, and other problems.

232. MACCRATE REPORT, *supra* note 4, at 138-40.
233. *Id.* at 141-51.
234. *Id.* at 151-57.
235. *Id.* at 157-63.
236. *Id.* at 163-72.
237. *Id.* at 172-76.
238. *Id.* at 176-84.
239. *Id.* at 185-90.
240. *Id.* at 191-99.
241. *Id.* at 199-203.
242. *Id.* at 203-207 (chapter titled "Recognizing and Resolving Ethical Dilemmas").

Being that this Article discusses the interplay of law and skills at great length, I will use this opportunity to summarize from a broader perspective. Projects 1 and 2 permitted the exercise of all ten *MacCrate* skills. Even Project 3—the "client alert"—permitted students to work on eight of the ten skills. Such broad integration of practice skills demonstrates the fact that a Cybersimulations approach permits cyberlaw to be used as a capstone course for upper-level students. However, Cybersimulations cannot foster the learning of all the skills needed for every legal context; indeed, no single course could accomplish that lofty goal. The simulations do, however, provide students with valuable skills in the cyberlaw context. Some of those skills may also be transplantable to other legal contexts. However, other lawyering skills may vary with the legal and factual context. Thus, the fact-finding relevant to a UDRP proceeding may vary from the fact-finding skills needed for drafting a securities offering, reviewing an asset purchase, or preparing a bankruptcy filing. Students should be reminded that learning the law in a new area cannot (and should not) be divorced from the skills needed to practice in that area. Students entering new areas may therefore develop a deeper appreciation for the reality that expertise in any area of practice requires more than just book knowledge, but likely also requires a subject-specific skill set of investigation, counseling, negotiation, and other relevant skills.

3. Integration of Broad Set of Values

The final of the four components of the *Carnegie Report*'s signature pedagogy of professional education is values.[243] As the *Carnegie Report* notes, outside of a professional responsibility class, values are often taught in law schools *tacitly*, i.e., by what is left unsaid or unstated but implied.[244] In contrast, the major studies noted in this Article—the *MacCrate*, *Carnegie*, and *Best Practices* reports—all recommend better and more integrated teaching of values.[245] The Cybersimulations provided a particularly effective way of tying values pervasively into the doctrine, theory, and skills studied

243. *See* CARNEGIE REPORT, *supra* note 4, at 24, 126.

244. *Id.* at 24. For example, a Civil Procedure professor who teaches students how to use discovery to burden an opponent with paper may be modeling an unstated and disturbing value: that it is appropriate to use process to harass or burden an opponent so long as the law does not expressly prevent it. Yet outside of a professional responsibility class or the occasional mention of Rule 11, professional values are largely ignored in the law-school curriculum.

245. *See* BEST PRACTICES, *supra* note 4, at 100; CARNEGIE REPORT, *supra* note 4, at 31; MACCRATE REPORT, *supra* note 4, at 135.

by the students.[246] I will therefore address the role of values in the simulations in some detail. Each of the three projects had a values component that tied directly into the relevant law and skills at hand. Each project also required each student to reflect upon an ethics dilemma with a memo-to-file on professionalism.[247] For Project 1, the cease-and-desist project, most students faced ethical dilemmas raised by the defendant's responses to their cease-and-desist letters relating to the problems of dealing with third parties.[248] Examples included the defendant:

- Claiming she was a minor or unsophisticated.[249]
- Asking the plaintiff's counsel for legal advice.[250]
- Stating that he was represented by counsel in the matter.[251]

Some students handled the ethical quandaries quickly and deftly; others fell prey to temptation, possibly violating the Rules of Professional Conduct. In addition, the student "attorneys" themselves sometimes engaged in conduct that gave rise to values scenarios without any prompting by the instructor, such as:

- Sending anonymous demands or inquiries to the domain registrant in which the lawyer did not identify himself or

246. *See* Goldman, *supra* note 5, at 758 ("Cyberlaw presents a great opportunity to teach ethics pervasively.") (citing Deborah L. Rhode, *Ethics by the Pervasive Method*, 42 J. LEGAL EDUC. 31 (1992)); *see also* BEST PRACTICES, *supra* note 4, at 100 (recommending pervasive teaching of professionalism throughout law school); CARNEGIE REPORT, *supra* note 4, at 177 (stating that "critical analysis of students' own experience in both simulated and actual situations of practice, including expert feedback, is a pedagogical process with enormous power" that is "only partially tapped" in most schools).

247. *See* CARNEGIE REPORT, *supra* note 4, at 178 (noting that "students must figure out for themselves an ethically defensible approach to their work").

248. *See* MODEL RULES OF PROF'L CONDUCT R. 4.1-4.4 (2011) (transactions with persons other than clients).

249. *See id.* R. 4.3 ("When the lawyer knows or reasonably should know that the unrepresented person misunderstands the lawyer's role in the matter, the lawyer shall make reasonable efforts to correct the misunderstanding."); *see also id.* R. 4.4 (respect for rights of third persons); *cf. id.* R. 1.14 (client with diminished capacity).

250. *See id.* R. 4.3 ("The 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.").

251. *See id.* R. 4.2 ("In representing a client, a lawyer shall not communicate about the subject of the representation with a person the lawyer knows to be represented by another lawyer in the matter, unless the lawyer has the consent of the other lawyer or is authorized to do so by law or a court order.").

herself as a lawyer representing a client.[252]

- Attaching privileged documents to a complaint or cease-and-desist letter (thus possibly leading to waiver).[253]
- Relying on cancelled trademark registrations as the basis for a legal demand (thus, possibly violating the requirements of truthfulness and non-frivolous claims).[254]

Projects 2 and 3 also had ethics components. For Project 2, the ethical dilemma was conflicts of interest.[255] For this project, I asked students to review all of the online activity and come up with a proposed listing of names for purposes of running a conflict check. Students were asked to consider who was a current or possible client, who was a current or possible adverse party, and who else might have some interest in the matter. Thus, students had to determine who might sue whom for what, even if such possibilities were remote.

After we met and discussed potential names, I presented students with the "results" of a fictional conflict check. For example, the conflict check might "reveal" that one ISP was a current client and another was a former client. Further, the fact pattern itself suggested that the "client's" general counsel—who might seek our "firm's" services on his own behalf—had the potential of being adverse to his employer, our current client. These topics provided students with good opportunities for considering rules regarding conflicts of interest for current and former clients, as well as the special concerns that can arise when a firm represents both a corporation and its agents.[256]

In real practice, a lawyer considering a new matter involving websites, users, and service providers may have to resolve numerous potential conflicts before concluding that it is appropriate to take on the matter. In considering whether such actors present conflicts with existing clients, the students had to think much more deeply about the law, Internet architecture, and the roles of online actors. Consequently, students learned law, skills, and professional values more deeply. Put differently, to identify actors who might present an actual or potential conflict, students needed to understand the law

252. *See id.* R. 4.3 cmt. 1 ("In order to avoid a misunderstanding, a lawyer will typically need to identify the lawyer's client and, where necessary, explain that the client has interests opposed to those of the unrepresented person.").

253. *See id.* R. 1.6(a) (confidentiality).

254. *See id.* R. 3.1 (non-frivolous claims); *id.* R. 4.1(a) (truthfulness).

255. *See id.* R. 1.7 to 1.11, 1.13, 1.18 (rules on conflicts).

256. *See id.* R. 1.7 (current clients); *id.* R. 1.9 (former clients); *id.* R. 1.13 (organization as client).

well enough to know who might be a client or adverse party, and needed to develop their skills well enough to explore the simulations to identify any such actors. This provides yet another example of why cyberlaw is particularly well-suited for online simulations.

For Project 3—the client alert—the ethics issue was focused on some of the risks arising from sending out informational bulletins. Students were cautioned that the purpose of a client alert is to provide generalized information and possibly obtain business from readers. They were further cautioned that the alert should be written so that it would not inadvertently lead readers to believe that they are receiving legal advice upon which they might rely to their detriment, and that the alert should contain disclaimers that: 1) caution readers from acting without the advice of an attorney; and 2) deter unilateral transmission of information to the "firm" that might lead to disqualification of the firm from representing existing clients.[257] Thus, students were responsible for writing a generalized client alert, including appropriate and prominent disclaimers, and writing a memo-to-file explaining steps taken to ensure ethical compliance.[258]

Generally speaking, it would be fair to say that at least one-half to two-thirds of students fell into one or more ethical traps, particularly in Project 1. Assuming that today's law students are as honest as the students from any earlier era, I can only conclude that the failure is in the academy, which needs to better incorporate values into the curriculum. A professional responsibility course is not enough. My students were at first discomfited by the idea of considering values in a cyberlaw course. But after experiencing realistic ethical dilemmas in immersive situations, students quickly realized that ethical and value judgments are a daily part of legal practice. In the end, the values scenarios likely served as the icing on the cake that made the simulations come alive.

Moreover, the values considerations went much further than considering rules of ethics.[259] The course also emphasized the

257. Initially, I considered using lawyer advertising but ultimately concluded that the topic would become a multi-headed hydra that would consume all the students' efforts. *See id.* R. 7.2 (concerning lawyer advertising).

258. *See id.* R. 1.18 (duties to prospective client); *see also* RESTATEMENT (THIRD) OF THE LAW GOVERNING LAWYERS § 14 (2000) (regarding formation of attorney-client relationship); David Hricik, *To Whom it May Concern: Using Disclaimers to Avoid Disqualification by Receipt of Unsolicited E-mail from Prospective Clients*, HRICIK.COM, http://www.hricik.com/eethics/disclaimer.doc (last visited Mar. 3, 2012) (online manuscript).

259. As the *Carnegie Report* notes, "[e]thics rightly includes not just understanding and practicing a chosen identity and behavior but, very importantly, a grasp of the social contexts and cultural expectations that shape practice and careers in the law." CARNEGIE REPORT, *supra*

importance of broader professional values, squarely within the context of cyberlaw and the Cybersimulations. First, the course used modified plagiarism rules. Students were told that they could—and in fact, should—use letters from *Chilling Effects* as models for their demand/takedown letters.[260] In a normal class with writing assignments, students would be warned that their work must be entirely original. However, my goal was to replicate the real-world experience, where lawyers typically do not "reinvent the wheel" every time they draft a letter or brief. Instead, they usually work from prior relevant documents, updating, revising, and adapting as applicable.[261] To ensure honesty in attribution and sourcing, I required students to include in their case files the original sources, if any, upon which they based their letters. For other matters, such as Project 3's client alert, student work product was required to be original, and strict attribution was required for borrowed ideas or text.

Second, students were permitted to discuss their strategies and

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note 4, at 31. "Ethical-Social Values" include matters such as honesty, trustworthiness, respect, and consideration, matters which extend beyond technical ethics to the social aspects of professionalism. *See id.* at 129-30.

260. CHILLING EFFECTS, http://www.chillingeffects.org (last visited Mar. 9, 2012).

261. Using other lawyers' letters raises interesting issues of copyright and fair use, which by themselves would be worthy of a separate article. As noted by William Patry, some lawyers try to assert copyright in their pleadings, briefs, and cease-and-desist letters. *See* William Patry, *Misuse via Cease and Desist Letters*, THE PATRY COPYRIGHT BLOG (Oct. 7, 2007), http://williampatry.blogspot.com/2007/10/misuse-via-cease-desist-letters.html. As Patry further notes, the real reason "lawyers sending cease and desist letters have taken to asserting copyright [is] to prevent the public disclosure of the enforcement effort itself." *Id.* Lydia Palas Loren similarly notes that cease-and-desist letters "are created not because of the incentive that copyright protection provides, but rather to protect the marketable right in a copyrighted work." Lydia Pallas Loren, *The Pope's Copyright? Aligning Incentives with Reality by Using Creative Motivation to Shape Copyright Protection*, 69 LA. L. REV. 1, 8 n.27 (2008).

In many cases, any copyright that might exist in the typical cease-and-desist letters is generally thin. Most letters are derivations of derivations, with formulaic recitations of what *Chilling Effects* describes as: "(1) gorilla chest thumping; (2) recitation of facts; (3) citation to cases and statutes; (4) a laundry list of potential remedies; (5) mention of [relevant law]; and (6) a reservation of rights." Maya Alexandri, *What to Expect When You're Expecting to Be Sued for Trademark Infringement*, CHILLING EFFECTS, http://www.chillingeffects.org/trademark/resource.cgi?ResourceID=14 (last visited Mar. 9, 2012). *But cf. In re* 43SB.com, LLC, No. MS07-6236-EJL, 2007 WL 4335441 (D. Idaho Dec. 7, 2007) (finding registration of a cease-and-desist letter to merit *prima facie* copyright due to copyright registration); Loren, *supra*, at 8 n.27 (citing *In re* 43SB.com). Further, even to the extent that cease-and-desist letters might merit copyright, the fair-use arguments for classroom use are *extremely* strong, considering that the use is educational and not for commercial gain; the letters are used for a different purpose than the originals; the originals are factual and highly functional; only enough is taken to serve as a model for a student letter; and there is no competing or likely market for licensing cease-and-desist letters for educational purposes. *See generally* 17 U.S.C. § 107 (2006) (fair use statute).

obtain feedback, but only from their current cyberlaw classmates. Just as in the real world, lawyers seek out each other's help within the firm, but must maintain strict confidentiality.

Third and especially crucial were vital class norms. I made clear at the beginning of the term that students would be encouraged to share their simulation experiences in class, regardless of whether those experiences reflected successes or missteps. Considering that the simulation experiences reflected a high degree of individualization due to variations in demand letters and infringer responses, such missteps permitted a large number of learning moments to be shared with the group. To underscore the importance of honest discussion, 25% of the course grade reflected class participation. Happily, every year students were extremely willing to share their missteps, turning errors into a brave willingness to share crucial learning moments.[262] I have no doubt: the best way to learn is to stumble, get back up, try again, and share your experience with others. I cannot emphasize this last point enough: the best learning moments occurred when students erred and shared.[263]

C. Student Assessment

1. Formative, Not Summative

A major problem with legal education is the end-of-semester final examination. Students get few opportunities to "course-correct" when the instructor's assessment of student work is delayed until the close of semester. Although these problems can be lessened by periodic quizzes and other techniques used to provide interstitial feedback, the reality is that most student assessment occurs when it helps the least. Such "summative," or after-the-fact assessment, ought to be supplemented or even replaced wherever feasible by "formative," or ongoing assessment that provides students with opportunities to learn from successes as well as missteps.[264] The

262. *See* THOMSON, *supra* note 39, at 28 (noting that Millennial students like to work in community).

263. The simulations permitted numerous other values moments beyond the scope of this Article. For example, a recurring question raised in the simulation is what form of relief might be in the client's best interests, in light of the law, the likelihood of obtaining an enforceable judgment, the client's financial resources, and the client's need for quick relief. Another question that often came up was how to deal with a dishonest client.

264. *See* BEST PRACTICES, *supra* note 4, at 255; CARNEGIE REPORT, *supra* note 4, at 164; *see also* Nathenson, *Uncharted Waters*, *supra* note 39 (draft) (addressing assessment). The Proposed ABA Standards would also emphasize formative assessment. *See* AM. BAR ASS'N, SECT. OF LEGAL EDUC. AND ADMISS. TO THE BAR, STANDARDS REV. COMM., PROPOSED

cyberlaw simulations permitted extensive forms of formative evaluation so that students could self-correct as the projects unfolded. Even better, the types of assessment used in the simulations often tended towards *experiential* assessment. Put differently, the formative assessment was often a part of the simulations, providing feedback to students in the context of a realistic lawyering experience.

Below I'll discuss four types of assessment used for the simulations: cease-and-desist letters, partner meetings, group meetings, and score sheets. As will be suggested, almost all of them can provide assessment that is *experiential*, *contextual*, *individualized*, and often highly *formative*. First, the responses to the students' cease-and-desist letters provided a particularly compelling vehicle for formative assessment. If a student made any errors in law, fact, tactics, or even in spelling or grammar, the defendant was quick to seize upon such errors as opportunities for delay and misdirection. Thus, if a student lawyer misspelled the relevant domain names in the demand—an easy error to make with domains such as IPHATTITUDES.COM—the defendant would quickly seize upon such an error to deny ownership of the misspelled domain name. Equally so, if the "lawyer" misstated the law or overstated the claim, such as relying on a cancelled trademark registration as the basis for a letter, the defendant was quick to point out the error. Moreover, such an error also permitted the defendant to accuse the errant lawyer of trying to commit a fraud or violate Rules of Professional Conduct.[265]

Like other feedback, such assessment could have been given solely in the form of a grade with handwritten comments. Instead, it came in the form of a realistic response from an "infringer" in the context of an immersive simulation. Such assessment is far superior to traditional feedback. It is *experiential* in that students face direct consequences from their sometimes flawed letters: if the students err, they make their ongoing lawyering more difficult. It is *contextual*, i.e., tied to the simulation.[266] It is *individualized*, tailored to the specific expertise level and needs of the particular letter and student. It is also at its base highly *formative*. Even when lawyers err, they can often fix the problem. Thus, the cease-and-desist responses provided feedback that permitted the students to "course-correct" and do better with later emails.

STANDARD 305 (draft after meeting of Nov. 2011).

265. *See supra* Part IV.B.3.

266. *See* BEST PRACTICES, *supra* note 4, at 141 (recommending "context-based education").

Second, students obtained feedback in their individual "partner meetings." The meetings were typically held halfway through Project 1, and served to explore how the students' cybersquatting projects were coming along. Much of the meeting was conducted "in role," with the professor taking on his "managing partner" persona and the students in "associate" mode.[267] Oftentimes students came to the meetings in business attire. The managing partner reviewed the developing case files and asked associates about their enforcement actions. Thus, each meeting was run similarly to how such a meeting might be conducted in real practice.[268]

To the extent that associates might have made major errors or were floundering, the partner meetings served as private opportunities to course-correct and to take steps to get the work back on track. Thus, such meetings were again highly *experiential* in replicating real meetings, tied to the specific *context* of cybersquatting enforcement, *individualized* to particular students, and highly *formative* in permitting course-correction. Such meetings were essential for helping students overcome initial missteps and gain broader perspectives of their educational experiences. Indeed, in many meetings, students admitted experiencing strong emotional reactions, either to their own missteps, or to their frustration at the intransigent and sometimes rude behavior of their online opponent. Such reactions underscore high levels of immersion and student engagement.

Third, the "practice group" meetings provided an excellent vehicle for formative assessment. Once the simulations began, class was usually run in role. So serious was I about staying in role that I insisted that students "bill" their "practice group" time via their timesheets. Here, the assessment was at the group level. This permitted group discussion of assigned materials, of the simulation websites, of problems involving investigation and documentation, and much more. Once the students began transmitting their cease-and-desist letters, we also used group time to discuss, as a group, the students' individual enforcement efforts. In my opinion, this was the course's greatest achievement. The class quickly adopted an "open-source" ethic, where each student was willing, even eager, to share

267. As needed, the instructor could figuratively "change hats" and speak as professor.

268. Indeed, in my prior life as a practicing attorney, I worked on such matters, sometimes as the enforcing attorney, and sometimes as the supervising attorney. It was very easy for me to channel those real-world experiences into the role-plays. Indeed, students have told me on occasion that when I "change hats" from professor to managing partner, they see an observable shift in my bearing, posture, and manner of speaking. It is as if the professor had left the room and an attorney came in.

successes and missteps with the group. Nobody was ever castigated for their missteps; rather, the managing partner and group helped the errant lawyer to work through the problem, and emotionally supported the volunteering attorneys for their willingness to share.

Students seemed very happy to get an opportunity to make mistakes in a laboratory where there would be no real-world consequences, and grateful for the respectful and supportive manner in which such feedback was shared.[269] Thus, the individualized assessments from the cease-and-desist responses were not "balkanized" to the benefit of the individual students,[270] but instead served to teach the entire group. As I repeatedly emphasized with the class, I knew that they would sometimes err, and always saw such missteps as opportunities for the most effective learning moments. I had made it clear to the class that anything done by a student "lawyer"—such as a cease-and-desist letter sent to the fictional "infringer"—was fair game for classroom discussion. I let them know that I expected them to have missteps as well as successes, and that we would share both in a respectful environment.[271] This established from the first day a culture that respected hard work but also saw errors as learning moments.[272] Needless to say, assessment is again *experiential*, *contextual*, *individualized* as well as communal, and *formative*, because all students benefit from the discussions while

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269. *See* CARNEGIE REPORT, *supra* note 4, at 99 (noting that simulations permit focusing on particular matters in "safety—without real-world consequences"); *see also* Catherine Ross Dunham, *Hidden Obstacles in the Mass Culture of American Legal Education: An Empirical Analysis*, 32 OKLA. CITY U. L. REV. 237, 239 (2007) (noting that a shift from the "sink or swim mentality" of end-of-term examinations "will allow law schools to produce legal professionals who will not need to bring self-handicapping strategies into the profession").

270. *See* Nathenson, *Uncharted Waters*, *supra* note 39 (draft).

271. Scholars are increasingly noting the importance of humanizing legal education. *See* BEST PRACTICES, *supra* note 4, at 1 (noting "negative effects" of legal education on "emotional well-being of our students"); *see also* B.A. Glesner, *Fear and Loathing in the Law Schools*, 23 CONN. L. REV. 627 (1991); Michael Hunter Schwartz, *Humanizing Legal Education: An Introduction to a Symposium Whose Time Came*, 47 WASHBURN L.J. 235 (2008). Additional guidance can be found in the Therapeutic Jurisprudence ("TJ") movement. *See* AMY D. RONNER, LAW, LITERATURE, AND THERAPEUTIC JURISPRUDENCE 268-89 (2010) (discussing the use of TJ to improve law teaching to avoid "Bartleby Syndrome"); Leslie Larkin Cooney, *Heart and Soul: A New Rhythm for Clinical Externships*, 17 ST. THOMAS L. REV. 407, 419 (2005) (noting value of TJ in building student empathy for practice); David B. Wexler, *Therapeutic Jurisprudence and Legal Education: Where Do We Go from Here*, 71 REV. JUR. U.P.R. 177, 180 (2002) (noting increasing use of TJ in legal education).

272. Japanese teachers ask students who make mistakes to share their thinking with the class. JOHN D. BRANSFORD ET AL., HOW PEOPLE LEARN: BRAIN, MIND, EXPERIENCE, AND SCHOOL 147 (2000). Sharing mistakes deepens everyone's understanding, but "only because Japanese teachers have developed a classroom culture in which students are skilled at learning from one another and respect the fact that an analysis of errors is fruitful for learning." *Id.*

their work continues.

Fourth and finally, students received feedback through written assessment of their case files for each project. After the students handed in their case files, I provided extensive written comments, both directly on the file documents, and more significantly, on a score sheet. The score sheet was provided to students near the beginning of the semester so they would know the outcomes I was seeking. Scoring for Project 1, for example, included matters such as correspondence, partner meeting, draft complaint, site documentation, source list, timesheet, and more.[273] As a more traditional form of assessment, written comments and scoring are not especially *experiential*.[274] Having said that, the score sheets expressly tied assessment to the skills and values experienced in the simulation. The score sheets therefore noted how each category implicated one or more of the *MacCrate* skills, and had sections devoted to professionalism.[275] While a more traditional form of assessment, this was also by definition *contextually* tied to each project, and *individualized* to each student's experience. Moreover, although such assessment was for the most part summative, comments for the first two projects can service *formative* assessment by permitting students to better learn what might be expected in subsequent projects.[276]

2. Scoring, Not Grading

Another important aspect of student assessment was the focus on scoring rather than grading. First, although there is nothing wrong with assigning grades to each project as the semester unfolds, I have found it more helpful to use a scoring system that divorces assessment from grades. Thus, I eschewed using any letter grades until issuing the final grade. Instead, when scoring any matter, I used a scale of 1 to 5.[277] Students were informed that their scores reflected my honest assessment of their work product, measured from what I might expect

273. For an example of such a score sheet, see Ira S. Nathenson, *Teaching Law with Online Role-Playing Simulations* 9-10, *available at* http://ssrn.com/abstract=1865880 (handout materials for 2011 summer conference of Institute for Law Teaching and Learning) [hereinafter Nathenson, *Score Sheet*].

274. Another option might be to engage in post-project reflective meetings with students, which can be both summative as well as experiential.

275. *See* Nathenson, *Score Sheet*, *supra* note 273, at 9-10.

276. *See* BEST PRACTICES, *supra* note 4, at 260 (summative assessments can be used formatively).

277. *See* Ferber, *supra* note 3, at 461 (noting use of 10-point qualitative scoring system).

a first-year associate in a law firm might do.[278] Thus, a score of "3" was neither nothing to be ashamed of, nor nothing to be particularly proud of. The goal was to divorce a "3" from the emotional weight of a "C."[279] From my perspective, a "3" should be granted for work that is generally adequate, with higher numbers reserved for stronger work product. This method of scoring was useful because it did not involve letter grades at all until final numbers were compiled to produce an overall numerical ranking, which could then be used to assign appropriate letter grades. Even better, by thinking in terms of actual quality rather than letter grades, students hopefully suffered less from the fear that an early failure might doom their grade for the remainder of the course.

The second consideration was weighting. The score sheet, given to students ahead of time, expressly indicated the weighting of the score for each matter. For instance, the source list was worth five points total (1x5), the site documentation worth ten (2x5), and the UDRP complaint worth thirty (6x5).[280] This helped students to realize that an error in one matter did not necessarily doom them in others. It also served a channeling function, so that students knew where to place their energies. Another aspect was the weight each project merited for the overall score. Each project was worth 25% of the final grade. The final 25% was for class participation, to underscore the importance of preparation and participation on a daily basis.

Third and finally, a simulation course cannot be a zero-sum game, so a curve was not used. Although it is doubtful that every such class can be filled with students doing "A" work, the instructor should leave open the possibility that all participants are capable of excellent performance. More importantly, the professor must foster a culture where students are motivated to compete with themselves rather than each other.[281]

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278. Needless to say, good work product from a junior associate would not come near to what I would expect of a more experienced attorney.

279. *See* CARNEGIE REPORT, *supra* note 4, at 31 (noting that curve grading ensures a competitive, "zero-sum game").

280. *See* Nathenson, *Score Sheet*, *supra* note 273, at 9-10.

281. *See* CARNEGIE REPORT, *supra* note 4, at 168 (arguing that rather than sorting students via a curve, law schools ought to "produc[e] as many individuals proficient in legal reasoning and competent practice as possible"). Indeed, a better metaphor would be a modified golf game where everyone can win by getting the best score, as opposed to professional football, where only one team can win the Super Bowl.

V. ILLUMINATING THE LAW OF THE HORSE(LESS CARRIAGE)

This Part comes full circle by returning to the questions that prompted the Cybersimulations, namely, the challenges posed by Judge Frank Easterbrook in *Cyberspace and the Law of the Horse*.[282] Part V.A examines learning theory to assess the value of Cybersimulations, and suggests a modest "feedback" framework for describing how they serve as an effective means for synergistically integrating the recommendations of *Best Practices* and the *Carnegie Report*. Part V.B responds to Easterbrook's descriptive and normative attacks on cyberlaw.

A. Assessing Cybersimulations

1. Guidance from Learning Theory

It would be disingenuous to suggest that I crafted this course with a deliberate and full understanding of learning theory. Like most law professors, I am not professionally schooled in teaching; accordingly, my understanding of pedagogy scholarship and of learning theory instead arose in the context of teaching the course and writing this Article. A dissection of the theoretical bases for adult learning is beyond the scope of this Article. Regardless, there is ample guidance on the benefits of Cybersimulations. One such source is a 1999 report by the National Research Council ("NRC") entitled *How People Learn: Brain, Mind, Experience, and School*,[283] which provides a useful framework. Although the report is not focused on graduate legal education, its observations are instructive.[284] It notes that a learning environment should be "learner centered, knowledge centered, assessment centered, and community centered."[285]

First, learner-centered environments "pay careful attention to the knowledge, skills, attitudes, and beliefs" that learners bring to the classroom.[286] Good teachers build "bridges" based on what students

282. *See supra* note 1; *see also supra* Part II.A.

283. BRANSFORD, *supra* note 272.

284. The study was written for K-12 and colleges, see *id.* at 5, but also has great applicability to graduate law education. Douglas R. Haddock, *Collaborative Examinations: A Way to Help Students Learn*, 54 J. LEGAL EDUC. 533, 544 (2004) (NRC study was primary text for 2001 AALS conference on "New Ideas for Experienced Teachers"); John O. Sonsteng et al., *A Legal Education Renaissance: A Practical Approach for the Twenty-First Century*, 34 WM. MITCHELL L. REV. 303, 392 (2007) (NRC findings applicable to "legal education setting").

285. BRANSFORD, *supra* note 272, at 131.

286. *Id.* at 133.

already have and provide students with what they need.[287] As John Sonsteng notes:

> A challenge for law professors is to create this kind of environment within the highly competitive law school classroom. Students who attend a class with pre-existing knowledge of course material . . . are perceived by fellow students as being at a competitive advantage. Learner-centered education must account for this and utilize techniques that allow the student to share knowledge without regard for the assessment structure of the course.[288]

Sonsteng's observations resonate strongly for a class like cyberlaw, where students vary significantly in their pre-existing levels of technical and doctrinal knowledge. Some will be techno-literate "power" users, experienced in Web design or computer programming.[289] Other students may have had some combination of often-relevant courses such as intellectual property, constitutional law, or professional responsibility.[290] Others will not. Most typically, students bring their own sets of knowledge and gaps. Overcoming this problem was not difficult, however. To deflate any fears of inherent advantages, it was essential to make clear from the beginning that success was not guaranteed by pre-existing knowledge and that failure was not pre-destined by a gap. It was also important to get students to realize that their success was mutually interdependent. Thus, class participation (25% of class grade) should include the extent to which students helped each other and shared knowledge. Most class projects permitted students to work together in general, and Project 2 expressly permitted partners.

Second, teaching should be knowledge-centered. This requires "establishing a baseline of knowledge before moving on to complex problem solving."[291] Thus, a teacher needs to first establish the pre-existing knowledge students bring (and don't bring) to the table, and then provide a "strong substantive and theoretical foundation."[292] As

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287. *Id.* at 136; *see also* Catherine Dunham et al., *Back to the Future: Creating a 21st Century Legal Education at Elon Law School*, 13 N.C. ST. B.J. 21, 24 (2008) ("A learning-centered education . . . . is not about giving students what they want (or feel entitled to), but rather about what they need.").

288. Sonsteng, *supra* note 284, at 393 (citing BRANSFORD, *supra* note 272, at 136-39).

289. *See* Goldman, *supra* note 5, at 756 ("This mix of students can lead to excellent cross-fertilization of ideas, but it can be challenging to design a course that satisfies both audiences.").

290. *Cf. id.* at 753 (noting potential for curricular overlap).

291. Sonsteng, *supra* note 284, at 393; *see also* Goldman, *supra* note 5, at 756 (noting that he spends initial weeks of semester "defining terms and explaining basic Internet technologies").

292. Sonsteng, *supra* note 284, at 393.

discussed previously, this baseline development included a number of weeks laying the foundation of issues such as theoretical underpinnings,[293] Web technology, jurisdictional issues, first amendment, and basics of intellectual property. Setting a baseline helped to set a positive tone for the class and to overcome any student apprehensions about pre-existing knowledge gaps.[294]

Third, teaching should be assessment-centered, providing "opportunities for feedback and revision" in light of the learning goals.[295] As noted previously, assessment should be both "formative," or ongoing feedback that improves *both* teaching and learning, as well as "summative," which measures what students have learned at the close of an activity.[296] Ideally, feedback should be a continuous, but unobtrusive, part of instruction.[297] Teachers should also help students to build self-assessment skills, enabling them to "assess their own work, as well as the work of their peers, in order to help everyone learn more effectively."[298] As discussed previously, assessment was a constant and integrated part of the Cybersimulations, through the cease-and-desist responses, practice group meetings, partner meetings, and score sheets.[299]

Finally, teaching should be community-centered. This requires norms that help people learn from each other and attempt to improve.[300] To establish community norms for a shared learning environment like a simulation, instructors must deflate the "pervasive competitiveness" of law school.[301] This requires in particular encouraging students to overcome their fear of mistakes. For any learning experience, and particularly for an ongoing simulation, students *must* make mistakes "[i]n order [for the instructor] to discover what the student does not know."[302] Therefore, it was crucial

293. *See supra* Part IV.A.1.

294. "Knowledge-centered environments intersect with learner-centered environments when instruction begins with a concern for students' initial preconceptions about the subject matter." BRANSFORD, *supra* note 272, at 136.

295. *Id.* at 139-40.

296. *Id.* at 140-41; Sonsteng, *supra* note 284, at 393 (noting that "both students and teachers need feedback"); *see also supra* Part IV.C.1.

297. BRANSFORD, *supra* note 272, at 140.

298. *Id.*

299. *See supra* Part IV.C.1.

300. BRANSFORD, *supra* note 272, at 144.

301. Sonsteng, *supra* note 284, at 394.

302. *Id.*; *see also* BEST PRACTICES, *supra* note 4, at 182 (quoting remarks of Anthony G. Amsterdam, Remarks at Deans' Workshop, ABA Section of Legal Education and Admissions to the Bar, Jan. 23, 1982 (unpublished)) (simulations permit the useful commission of "'first-level

to establish classroom "norms that value the search for understanding and allow students (and teachers) the freedom to make mistakes in order to learn."[303] At the same time, high expectations are crucial, and "can have a dramatic impact" on student performance.[304]

As noted previously, the success of the Cybersimulations hinged on the class accepting and implementing norms permitting mutual assistance and emotional support.[305] I made clear at the beginning of the term that students would be encouraged to discuss their simulation experiences, regardless of whether those experiences reflected successes or missteps. Students were permitted to seek each other's opinions and comments on their work product—just as would occur in a real firm. This allowed the class to develop a culture of mutual assistance and interdependence. This culture of "andragogy," where learners teach one another, was far preferable to the "pedagogy" of traditional "assembly line" teaching.[306] At the same time, I made it clear that I expected students to create competent work product, and that I felt that each of them was fully capable of doing so. This made students work extremely hard, creating work product that perhaps many of them did not realize they could do.

2. *Best Practices*, *Carnegie Report*, and Signature Pedagogies

Before returning to Easterbrook's challenge, we should also revisit *Best Practices* and the *Carnegie Report* from a broader perspective.

a. Best Practices

As noted in Part II.C.3, *Best Practices* urged educators to address four basic stages of curriculum development: 1) identifying educational objectives, 2) selecting learning experiences useful in reaching the educational objectives, 3) organizing the learning experiences for effective instruction, and 4) designing methods to evaluate the effectiveness of the learning experiences.[307] I will address

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mistakes'" in the safety of the classroom); Ferber, *supra* note 3, at 424 ("The kind of learning that comes from disastrous consequences is in some ways the most profound.").

303. BRANSFORD, *supra* note 272, at 145.

304. Sonsteng, *supra* note 284, at 398.

305. *See* text accompanying note 269.

306. Sonsteng, *supra* note 284, at 389-92, 390 n.438 (crediting educational theorist Malcolm Knowles for popularizing the concept of andragogy, and terming traditional pedagogy an "assembly line").

307. BEST PRACTICES, *supra* note 4, at 3; *see also supra* Part II.C.3.

these in turn.

First, as I developed and refined the Cybersimulations, their educational objectives became clearer. Because of my decision to "pick and choose" topics for lesser and greater coverage, students needed to learn some topics on a basic level (such as first amendment, which is covered more extensively in constitutional law). Other topics required much greater depth (such as primary and intermediary liability under defamation, copyright, and trademark law). Students needed to parlay their learning into realistic work product, demonstrating their increasing expertise by assembling useful case files reflecting cease-and-desist enforcement, diligent documentation, and mastery of the UDRP arbitration process. They also needed to demonstrate advancing mastery of other topics, such as DMCA takedown notices and put-backs, as well as the intricacies of the CDA. Competent case files would reflect increasing student mastery of all the *MacCrate* factors. Also, the class would be run in a way that integrated the Rules of Professional Conduct with broader professional values, such as truthfulness to others, reflection, and teamwork. Such objectives are ambitious but attainable.

Second, the instructor should choose useful learning experiences to implement those objectives. As noted in Part IV.A, this approach involved the baseline period of core doctrinal and theoretical readings,[308] followed by a shift to the three experiential projects.[309] As the simulations unfolded, I used techniques of improvisational theatre to add new facts or materials, in light of my ongoing assessment of the students' need for additional, more complex, or when appropriate, less complex facts.[310] In turn, the experiential projects contained significant incorporation of doctrine, theory, practice skills, and professional values.[311]

Third, the learning experiences should be effectively organized. As noted, this was accomplished by starting out with a baseline period, which was used to provide a shared theoretical and doctrinal vocabulary.[312] The projects unfolded in a manner that permitted "scaffolding," where the students were able to attain incremental mastery, but also where the difficulty of the issues was always one or two steps beyond the comfort level of the students, requiring students

308. *See supra* Part IV.A.1.
309. *See supra* Part IV.A.2, IV.A.3.
310. *See supra* Part IV.A.2.
311. *See supra* Part IV.B.
312. *See supra* Part IV.A.1.

to reach for ever-higher levels of mastery.[313]

Finally, the instructor must design methods to evaluate the effectiveness of the learning experience. A vital component of the scaffolding noted above was the highly formative nature of various types of individual and group assessment, which permitted students to "course-correct" as the simulations unfolded.[314] The score sheets, serving both formative and summative assessment purposes, permitted detailed professor feedback. This reflection permitted me to evaluate the effectiveness of the learning experiences from individual, group, and instructor perspectives.

b. Carnegie Report

Part IV.B previously discussed how the simulations effectively implemented the *Carnegie Report*'s signature pedagogy. In contrast, this subsection provides a broader perspective. With traditional law school curricula, most courses are doctrinal, presenting a combination of doctrine and theory. Students learn practice skills in other courses, such as legal writing, negotiation, and the like. Students learn professional values in a professional responsibility class. Synergies between those subjects can arise, but they tend to be minimal. However, the relationship between doctrine/theory, skills, and values can be far more dynamic. As the *Carnegie Report* suggests, "Formal knowledge is not the source of expert practice. The reverse is true: expert practice is the source of formal knowledge about practice."[315] Thus, when the teaching of skills and values is integrated with the teaching of doctrine and theory, each feeds back into the others, potentially increasing the overall value of each.[316] As suggested by Figure 1,[317] the experiential learning from the Cybersimulations served as glue that permitted broad feedback synergies.

313. *See supra* Part IV.A.3.

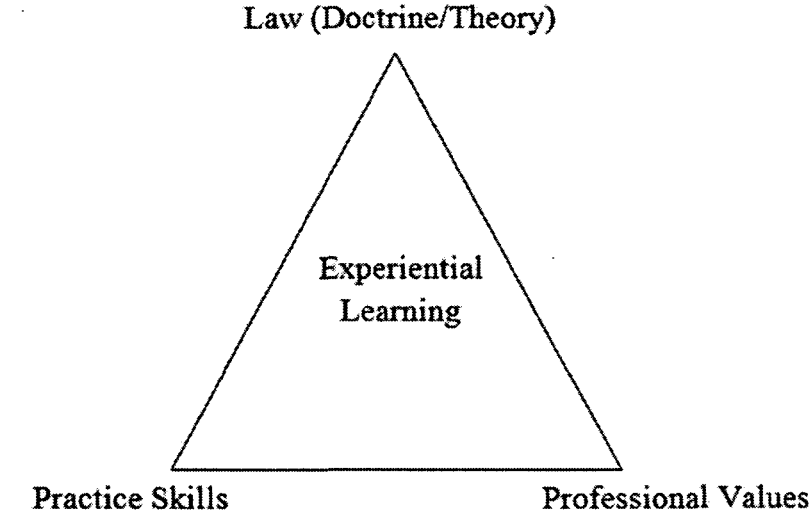
314. *See supra* Part IV.C.1.

315. CARNEGIE REPORT, *supra* note 4, at 118.

316. *Id.* at 13 (noting that theoretical and practical knowledge each "advance when it is understood in relation to its complement").

317. This feedback arrangement is evocative of the normative framework I proposed in Ira S. Nathenson, *Civil Procedures for a World of Shared and User-Generated Content*, 48 U. LOUISVILLE L. REV. 911, 947-48 (2010). That framework, however, addressed feedback between components of procedural justice. Regardless, the feedback loops discussed in that article may inform the nature of positive feedbacks between doctrine/theory, skills, and values.

FIGURE 1. Feedback within Legal Education's Signature Pedagogy



As the *Carnegie Report* suggests, "it is extremely rare for the three aspects of legal apprenticeship to be linked so seamlessly that each contributes to the strength of the others, crossing boundaries to infuse each other."[318] But perhaps with Cybersimulations, this is possible. Here, the learning is holistic, integrated, and synergistic. Cyberlaw doctrine and theory are learned more deeply because students are forced to simulate cyberlaw practice in the context of practice skills and professional values. Each feeds back on the others. For example, students must determine how to document source code and interpret HTML and meta-tags. In turn, they better understand doctrine and theory. When studying intermediary liability, students must think about potential client conflicts arising from the intermediaries involved in the simulation. This allows students to better understand the nature of intermediary liability, as well as the structural relationships between the relevant stakeholders (namely, users, intermediaries, and third-party claimants). Such integrated learning uses skills to better learn law and values, law to better learn skills and values, and values to better learn law and skills. Indeed, when teaching cyberlaw in this manner, it makes little sense to think of law, skills, and values separately. For expert practitioners, there is

318. CARNEGIE REPORT, *supra* note 4, at 191.

no difference between the three, and all serve as inseparable components of a unified whole.

It should also be noted that the *law* being taught is not just cyberlaw. A holistic and integrated learning experience such as Cybersimulations permits the learning of law from other doctrinal areas. Examples include civil procedure (jurisdiction and subpoena procedure), constitutional law (free speech, commerce clause), torts (defamation), and professional responsibility. Thus, Cybersimulations do not just permit learning of cyberlaw: they also foster the learning of the broader law—or in Easterbrook's terms, the "entire law."[319] One reason for this is the reality that cyberlaw is to some extent an amalgam of other subjects. An additional reason is that effective simulation teaching requires law students to start acting as "whole" attorneys, rather than thinking only within the artificial constraints of law-school "subjects." I would therefore expect that effective simulations in *any* subject might permit holistic teaching of law, skills, and values, and to reach well beyond the subject at hand. However, because cyberlaw is the subject most closely aligned with the legal issues involving *Internet* communications and *Web* technologies, it may provide particularly effective synergies when taught through *online* simulations.

As noted previously,[320] these conclusions about the effectiveness of simulations appear to be in accord with the thinking of the ABA, which recommends the adoption of outcomes learning, with an emphasis on the integrated teaching of doctrine, theory, skills, and values.[321] The ABA also would require, as noted, that all upper-level JD students to take at least three credits of experiential learning, such as simulations.[322] Regardless of whether the ABA implements its proposed standards, this Article concludes that such standards are appropriate, and recommends that law schools continue to develop simulations and other forms of experiential learning.

B. Responding to Easterbrook

The last two subsections respond to Judge Easterbrook's criticisms of cyberlaw. As suggested earlier, Easterbrook's challenge

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319. *See* Easterbrook, *supra* note 1, at 207.

320. *See supra* note 41 and accompanying text.

321. *See* AM. BAR ASS'N, SECT. OF LEGAL EDUC. AND ADMISS. TO THE BAR, STANDARDS REV. COMM., PROPOSED STANDARD 302, 304 (draft after meeting of Nov. 2011).

322. *See id.* 304(a)(3).

consists of two intertwined attacks.[323] The first is essentially descriptive: there *is* no cyberlaw because it is not sufficiently cohesive.[324] Easterbrook's second attack is essentially normative: only cohesive subjects that can "illuminate the entire law" should be taught in law schools.[325] As Easterbrook concludes, cyberlaw lacks cohesiveness and therefore should not be taught in law schools.[326] Below I respond to each of those attacks and conclude that even if Easterbrook prevails in his first attack, cyberlaw is an ideal course for capstone law school learning, and ought to be taught, especially when the teaching incorporates experiential components.

1. Descriptive "Surface" Attack

As any judge knows, the jurist who prepares the first draft of an opinion gets to frame the issue to which all others respond. Judge Easterbrook has done exactly that through his use of the "horse" metaphor in his article *Cyberlaw and the Law of the Horse*.[327] However, Easterbrook's framing of the issue is flawed. Easterbrook suggests that cyberlaw is no more useful than a modern-day course on horse law that collects disparate strands of contracts and horses, torts and horses, and the like.[328] As he says: "Any effort to collect these strands into a course on 'The Law of the Horse' is *doomed to be shallow* and to *miss unifying principles*."[329]

Some commentators have rejected the "Law of the Horse" metaphor. Renato Mariotti describes Easterbrook's metaphor as a "straw horse," pointing out that nobody is suggesting that cyberlaw be the focal point of all legal study.[330] Henry T. Greely says that "many time-honored law school subjects and legal fields are, in their own

323. *See supra* Part II.A.

324. *See* Easterbrook, *supra* note 1, at 207.

325. *Id.*

326. Other scholars have noted the importance of parsing descriptive from normative claims. Dan Hunter notes that "the received wisdom has confused the descriptive question of whether we think of cyberspace as a place with the normative question of whether we should regulate cyberspace as a regime independent of national laws." Hunter, *supra* note 158, at 443; *see also* Jack L. Goldsmith, *Against Cyberanarchy*, 65 U. CHI. L. REV. 1199, 1200 (1998) (noting descriptive and normative claims by regulation skeptics).

327. *See* Easterbrook, *supra* note 1.

328. *See id.* at 207.

329. *Id.* (emphasis added).

330. Mariotti, *supra* note 19, at 298; *see also* Einer R. Elhauge, *Can Health Law Become a Coherent Field of Law?*, 41 WAKE FOREST L. REV. 365, 368 (2006) ("I have always found this analogy more clever than illuminating.").

ways, laws of the horse."[331] Liam Séamus O'Melinn points out that there was in fact once a "law of the horse," namely feudalism.[332] Yet another author has defended the "Law of the Horse" regarding *horses*.[333]

But I will accept Easterbrook's descriptive attack at face value. Rephrased in my own words, Easterbrook thinks that cyberlaw is so shallow that it scratches at no more than the *surface* of the law. This turn of words permits a useful extrapolation because the word "surface" also parallels the *Carnegie Report*'s use of "surface structure" as the first, and only the first, of the four components of a signature pedagogy in professional education. As noted previously, the *Carnegie Report* uses four such terms: *surface structure*, *deep structure*, *tacit structure*, and *shadow structure*, respectively describing doctrine, underlying theory, professional values, and practice skills.[334]

When one considers Easterbrook's descriptive attack through the lens of the *Carnegie Report*, the attack has some initial appeal. If one defines cyberlaw only from the perspective of black letter law—the *surface* structure in terms of the *Carnegie Report*—then Easterbrook is arguably correct, especially from the vantage point of 1996 when his article was published. Back then, "Cyber"-law was only starting to be written, and the issues at hand often seemed to be little more than a potpourri of legal doctrines tied loosely together by a new technology. Indeed, I shared this concern when first preparing a syllabus to teach cyberlaw, a concern that ultimately led to the development of the Cybersimulations pedagogy.[335]

One could respond to Easterbrook by pointing out the fact that today, there is a large body of cyberlaw cases, statutes, and other

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331. Henry T. Greely, *Some Thoughts on Academic Health Law*, 41 WAKE FOREST L. REV. 391, 405 (2006). The *Carnegie Report* points out that first-year doctrinal courses exist due to "forced decontextualization." CARNEGIE REPORT, *supra* note 4, at 59. In contrast, Cybersimulations force students to confront legal, practice, and values issues in context, ramping up the uncertainty, and forcing students to strive towards higher levels of integrated expertise.

332. Liam Séamus O'Melinn, *Software and Shovels: How the Intellectual Property Revolution Is Undermining Traditional Concepts of Property*, 76 U. CIN. L. REV. 143, 179 (2007).

333. Joan S. Howland, *Let's Not "Spit the Bit" in Defense of the "Law of the Horse": The Historical and Legal Development of American Thoroughbred Racing*, 14 MARQ. SPORTS L. REV. 473 (2004); *see also* Darian M. Ibrahim & D. Gordon Smith, *Entrepreneurs on Horseback: Reflections on the Organization of Law*, 50 ARIZ. L. REV. 71 (2008).

334. CARNEGIE REPORT, *supra* note 4, at 24; *see also supra* text accompanying notes 58-63.

335. *See supra* Part II.B.

forms of legal regulation: the DMCA, the CDA, the UDRP, and much more.[336] Such materials would surely demand treatment in a cohesive course of study. The existence of Internet-specific legal regulation, however, does not prove that there is a cohesive body of cyberlaw. Instead, it merely shows that in some contexts, regulators have concluded that an exceptionalist approach is appropriate. It does not prove that cyberlaw has a concrete foundation.

There are better responses. Easterbrook's attack is rooted in a metaphorical flaw: he accuses cyberlaw of having nothing more than surface utility, yet his own attack only scratches the surface of what is possible with the study of cyberlaw. Law schools are not mere feeding troughs for black letter law. They also seek to fuel students' minds with well-considered theories and counter-theories that seek to tie together otherwise disparate and so-called "black letter" rules. The *Carnegie Report* refers to this as the "deep structure," conveying a metaphor of a grounding of law that might seem otherwise unrooted.[337] Unsurprisingly, then, many of the commentators following in Easterbrook's wake have taken a theoretical approach, attempting to provide frameworks and perspectives that might either supply a cohesive theory of cyberlaw or a meaningful definition of cyberspace. Lessig's response in *The Law of the Horse: What Cyberlaw Might Teach*—proposing the modalities of regulation as a justification for the study of cyberlaw—serves as the paradigmatic example of a theoretical response to Easterbrook.[338]

Easterbrook's challenge has thus led to a rich body of cyberlaw scholarship, including whether "cyberlaw" is a useful organizing topic,[339] as well as the exceptionalist/unexceptionalist debate, which questions whether cyberspace merits a separate regime of regulation (the "exceptionalists"), or whether it should be regulated no differently from the real world (the "unexceptionalists").[340] At its core, these scholarly exchanges seek in part to find the "deep" ground that might justify the field of study.

The present Article, however, does not seek to resolve the exceptionalist/unexceptionalist divide. Nor do I seek at this time to propose a theory for cyberlaw or a definition of cyberspace. Instead, I

336. As Goldman points out, legislatures have kept busy in the past decade passing laws expressly aimed at the Internet and computers. *See* Goldman, *supra* note 5, at 750.

337. CARNEGIE REPORT, *supra* note 4, at 24.

338. Lessig, *Law of the Horse*, *supra* note 1, at 548-49.

339. *See supra* note 17 and accompanying text.

340. *See* David G. Post, *Against "Against Cyberanarchy,"* 17 BERKELEY TECH. L.J. 1365, 1367-69 (2002) (crafting terms "exceptionalists" and "unexceptionalists").

conclude that the subject is worth teaching even if Easterbrook's descriptive attack on cyberlaw is 100% correct. Thus, even if cyberlaw lacks a coherent definition—a concession I do not make—it is still worth teaching. Today, no law schools (or very few, if any) provide courses in automobile law. Yet a century ago, automobiles challenged legislators and courts every bit as much as computers and information networks do today. Just as scholars today write voluminous commentary on cyberlaw, scholars of a century ago wrote treatises on automobile law.[341]

Indeed, just as Easterbrook has attacked cyberlaw as a new "Law of the Horse," the earlier law of automobiles was a legal response to the then-new "Horseless Carriage."[342] A century ago, it was critical to pay close attention to how lawmakers would, or ought to, regulate the new transportation technology and emerging transportation network. Even though automobile law eventually became part of a broader tapestry of the law, there was great importance back then in studying the disruptions being caused by the automobile. Studying the disruptions caused by new networks and technologies while those disruptions take place *is* a way to learn more broadly about how law is, and ought to be, created. Studying transformations in law reminds students that the law is ever-evolving, and that doctrine is never "black letter." Thus, I have no doubt that 100 years from now, the idea of a "cyberlaw" will be as quaint as the law of automobiles.[343] In fact, in light of the pace of Internet developments, the demise of "cyberlaw" may come sooner than that.[344] But as further argued in the final subsection below, it still ought to be taught today.

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341. *See, e.g.*, CHARLES J. BABBITT, THE LAW APPLIED TO MOTOR VEHICLES (1911); C.P. BERRY, THE LAW OF AUTOMOBILES (3d ed. 1921); I BYRON K. ELLIOTT & WILLIAM F. ELLIOTT, A TREATISE ON THE LAW OF ROADS AND STREETS (3d ed. 1911); XENOPHON P. HUDDY, THE LAW OF AUTOMOBILES (2d ed. 1909).

342. *See* OREGON MOTOR VEHICLES DIV., DEP'T OF TRANSP., REINING IN THE HORSELESS CARRIAGE: THE HISTORY OF REGULATING MOTOR VEHICLES IN OREGON (published during the term of David P. Moomaw, Administrator Motor Vehicles Division).

343. Jacqueline Lipton points out Professor Raymond Nimmer's similar observations regarding the law of electricity, that what is new may become "commonplace" later on. Lipton, *supra* note 17, at 702 (discussing RAYMOND T. NIMMER, INFORMATION LAW ¶ 1.02 (1996) (citing SIMON CROSWELL, CROSWELL ON THE LAW OF ELECTRICITY (1895) and ARTHUR F. CURTIS, THE LAW OF ELECTRICITY (1915))); *see also supra* note 17 (collecting sources).

344. "When technology does start to 'work' for its intended purpose, there is a period when we have to learn about and understand its benefits before we integrate it into our lives and livelihoods. Finally, we stop noticing it and it does not seem like technology any more." THOMSON, *supra* note 39, at 74. Perhaps cyberlaw might be defined as the study of technology (and networks) that we have yet to completely integrate into our lives, and which we still can't help but notice. Once cyberspace is fully integrated and becomes an invisible part of the tapestry of our lives, we may no longer consider it a subject worthy of separate study.

2. Normative "Illuminate" Attack

The more serious of Easterbrook's two challenges is his normative attack, which asserts that cyberlaw should not be taught, because it cannot illuminate the entire law.[345] Raymond Ku disagrees with this claim.[346] As he notes, new cyberlaw scenarios require us to consider first, whether old real-space or new cyberspace rules ought to apply, and second and more importantly, whether we should reconsider pre-cyberspace rules and values.[347] Similarly, Andrew L. Shapiro sees value in cyberlaw even if it "is not a subject, like torts or contracts or bankruptcy, that we should, from the standpoint of legal ontology, try to set off to one side."[348] He maintains that we should not "abandon the very notion of the 'law of cyberspace,' . . . . so long as we focus on the law—or laws—of cyberspace."[349]

At its heart, Easterbrook's challenge is a *pedagogical* challenge to cyberlaw as a component of the law school curriculum. But Easterbrook is incorrect. Even if cyberlaw's theoretical underpinnings are subject to debate, and even if they ultimately do not exist, cyberlaw should be included in the curriculum, particularly to the extent that instructors can implement skills-and-values components such as those discussed in this Article.[350]

Cybersimulations permit a kind of immersive case study that expands upon the benefits of Dean Langdell's case method, while side-stepping its limitations. These benefits can be underscored by considering Jerome Frank, who was a strong critic of Langdell's case method nearly 75 years before the publication of *Best Practices*.[351] In 1933, Frank published a polemic against Langdell and his case method, in which he recommended that the case method focus on *cases* rather than appellate opinions:

> [T]he study of cases . . . should be based to a very marked extent on reading and analysis of *complete records of cases*—beginning with the filing of the first papers, through the trial in the trial court and to and through the upper courts. *Six months properly spent on one or two elaborate court records, including the briefs (and*

345. *See* Easterbrook, *supra* note 1, at 207.

346. *See* Ku, *Foreword*, *supra* note 17, at 128.

347. *Id.* at 128-29.

348. Andrew L. Shapiro, *The Disappearance of Cyberspace and the Rise of Code*, 8 SETON HALL CONST. L.J. 703, 717 (1998).

349. *Id.* at 718.

350. One author, even while attacking cyberlaw as a useful concept, nevertheless concedes that it is "a delightful new playground for old games." Sommer, *supra* note 17, at 1231.

351. Frank, *supra* note 50, at 912-13.

> *supplemented by reading of text-books as well as upper court opinions) will teach a student more than two years spent on going through twenty of the case-books now in use.*[352]

Frank's characterization of the case study is remarkably prescient of the recommendations made in our times by *Best Practices*, the *Carnegie Report*, and the ABA. Cyberlaw simulations permit a similar kind of case study, and perhaps one even more immersive than is possible with other subjects, because the disputes are researched and developed by students *while using the very same online materials that underlie the subject of academic inquiry, i.e., cyberlaw*, as the legal dispute unfolds. When cyberlaw is taught in this manner, students gain far more than disjointed doctrine: they also experience the dilemmas discussed in the corresponding theory, struggle with contextual practice skills, and grapple with realistic ethics quandaries. Thus, returning to Easterbrook's "shallow" metaphor, this Article suggests that Cybersimulations permit teaching that reaches far more deeply than the surface and even beyond legal theory, making visible the otherwise "shadow" pedagogy of skills and acknowledging the usually "tacit" pedagogy of values. Cybersimulations permit the integrated teaching of the entire law.

This intensive and holistic integration of law, skills, and values strongly suggests that simulations methodologies permit Cybersimulations to serve as an effective capstone course for upper-level students.[353] As described by Russell Weaver and David Partlett, a capstone course should

> enrich the educational experience, giving students the tools for a career that will be tested in the gales of change that law practice will experience in the rapidly changing twenty-first century world. It must help students place their three years of legal study in perspective, and must lead students to greater and more in-depth insights regarding the law. By their third year of law school, students should be ready for this greater depth and perspective. . . .[354]

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352. *Id.* at 916 (emphasis in original).

353. *See* BEST PRACTICES, *supra* note 4, at 168 (recommending consideration of which objectives that can be taught "most effectively and efficiently" through experiential education); CARNEGIE REPORT, *supra* note 4, at 195 (recommending treating final year of law school as an opportunity for "capstone" learning).

354. Russell L. Weaver & David F. Partlett, *Remedies as a "Capstone" Course*, 27 REV. LITIG. 269, 271-72 (2008); *see also* Robert C. Illig, *Teaching Transactional Skills through Simulations in Upper-Level Courses: Three Exemplars*, 2009 TRANSACTIONS: TENN. J. BUS. L. 15 (2009); Judith L. Maute, *Lawyering in the 21st Century: A Capstone Course on the Law and*

Some commentators make a distinction between "capstone" and "keystone" learning experiences.[355] Karl Okamoto describes a "keystone" course as something that "could serve to link the traditional doctrinal courses of the early years of law school with the 'experiential' and 'skills' courses that come in the upper years."[356] John O. Sonsteng rejects both terms, preferring "transition courses," which "indicates a life-long transition from less to more experience, less to more skill, and less to more knowledge."[357] Regardless of the terminology, it would appear that cyberlaw simulations serve all these functions, by allowing students to transition into practice by tying their earlier learning into an experiential context.

Another important observation about the "Law of the Horse" comes from Karl Llewellyn. Easterbrook cites former Chicago law dean Gerhard Casper as his immediate source for the phrase "Law of the Horse" in the context of education, but credits the phrase's origin to Karl Llewellyn, who wrote pieces regarding horses and the development of commercial law.[358] Ironically, Easterbrook might wish to rethink his use of the "horse" metaphor in light of later Llewellyn writings, which provide another view on horses. Whereas Easterbrook uses "horse" to describe a course lacking in cohesion or utility, Llewellyn discusses a very different "horse sense" in his 1960 book *The Common Law Tradition: Deciding Appeals*.[359] Regarding judges, Llewellyn describes "horse sense" as an "extraordinary and uncommon kind of experience, sense, and intuition which was characteristic of an old-fashioned skilled horse trader in his dealings either with horses or with other horse traders."[360] Horse sense is "the balanced shrewdness of the expert in the art."[361]

Ethics of Lawyering, 51 ST. LOUIS U. L.J. 1291 (2007). A number of authors speak about the potential for cyberlaw or intellectual property topics to serve capstone functions. *See* Shubha Ghosh, *The Transactional Turn in Intellectual Property*, 35 U. DAYTON L. REV. 329, 341 (2010); Gibbons, *supra* note 5, at 717; Goldman, *supra* note 5, at 750-51.

355. *See* Toni M. Fine, *Reflections on U.S. Law Curricular Reform*, 10 GERMAN L.J. 717, 733 & n.77 (2009) (quoting DENISE ROY, PATHWAYS 66).

356. Karl S. Okamoto, *Teaching Transactional Lawyering*, 1 DREXEL L. REV. 69, 74 (2009).

357. Sonsteng, *supra* note 284, at 450 n.776.

358. *See* Easterbrook, *supra* note 1, at 214 & n.9 (citing Karl N. Llewellyn, *Across Sales on Horseback*, 52 HARV. L. REV. 725, 735, 737 (1939); Karl. N. Llewellyn, *The First Struggle to Unhorse Sales*, 52 HARV. L. REV. 873 (1939)).

359. KARL N. LLEWELLYN, THE COMMON LAW TRADITION: DECIDING APPEALS (1960); *see also* Menkel-Meadow, *supra* note 52, at 601-02.

360. LLEWELLYN, *supra* note 359, at 201.

361. *Id.* at 121; *see also* Steven L. Winter, *Indeterminacy and Incommensurability in Constitutional Law*, 78 CAL. L. REV. 1441, 1457 & n.62 (1990) (noting that Llewellyn

As put by Carrie Menkel-Meadow, "Like Frank, [Llewellyn] recognized, as well, that a lawyer's and judge's values would affect the interpretation and practice of law and that it was necessary to teach students to develop their skills and craft in putting law, facts, and values together."[362] Thus, to parry metaphor with metaphor,[363] Cybersimulations permit experiential teaching that ties together doctrine, theory, skills, and values so effectively, that using them to teach the "Law of the Horse" helps students to develop their "horse sense."[364] Such a horse sense is essential to the fully developed expert practitioner.[365] As a course that can unite the cognitive, practical, and emotive aspects of professional identity, cyberlaw is worth teaching.

Moreover, the subject-matter of cyberlaw may make it particularly suitable for synergistic, holistic, and immersive teaching. As suggested in David C. Thomson's *Law School 2.0*, in a "learning-centered approach," students are "involved in the discovery and construction of knowledge" in a "non-linear" fashion.[366] Noting that the Web's hypertext is also non-linear, he suggests that the minds of today's students may have been formed in part by their having learned "in a hypertextual way."[367] This may make the study of cyberlaw—which is, inter alia, the study of a non-linear, hypertextual communications network—an ideal fit for "many of the sorts of changes being discussed in legal education."[368] Moreover, although online simulations may be useful for many law-school subjects,[369]

"advocated reliance on the unreflexive, experientially and culturally grounded reason that he referred to as 'situation-sense' and 'horse sense'") (footnote omitted).

362. Menkel-Meadow, *supra* note 52, at 602.

363. *Cf.* LLEWELLYN, *supra* note 359, at 521-28 (describing how dueling, contradictory canons of statutory construction "thrust" and "parry" at one another).

364. *See* Jonathan Rose, *The MacCrate Report's Restatement of Legal Education: The Need for Reflection and Horse Sense*, 44 J. LEGAL EDUC. 548, 562-63 (1994); *see also* CARNEGIE REPORT, *supra* note 4, at 9 ("The mark of professional expertise is the ability to both act and think well in uncertain situations.").

365.

> [C]ompared to novices, experts possess not only knowledge but highly structured knowledge. That is, they understand concepts basic to their domains, and they have mastered well-rehearsed procedures, or "schemas," for thinking and acting. These schemas enable experts to bring their knowledge to bear on situations with remarkable speed and accuracy.

CARNEGIE REPORT, *supra* note 4, at 25.

366. THOMSON, *supra* note 39, at 30.

367. *Id.* at 30-31. He further and correctly notes that "much of the law is in fact hypertextual." *Id.* at 31.

368. *Cf. id.* at 22 (describing how Web 2.0 technology supports the ideals of modern legal educational reform).

369. Elsewhere, I discuss the utility of online role-plays outside the cyberlaw context in a

they are particularly well-suited for learning *cyberlaw*, because *Cybersimulations* require intensive study, use, and reflection regarding *the very tools of cyberspace*, which are used in role-playing, investigating, analyzing, negotiating, and problem-solving.

Thus, Cybersimulations can do far more than illuminate cyberlaw. They can also illuminate the entire law: not in the sense that they teach every aspect of legal doctrine, because no course could do that. And not merely in the sense that cyberlaw permits learning about how law regulates in other contexts.[370] Instead, Cybersimulations teach students to develop their "horse sense" for today's "Law of the Horseless Carriage," helping students to begin forming professional identities, with integrated understandings of legal doctrine, legal theory, practice skills, and lawyering values. Moreover, Cybersimulations permit this to be done through an immersive methodology that is firmly and necessarily rooted in the very architecture that underlies a semester of capstone study.

VI. CONCLUSION

Regarding cyberlaw, there is nothing wrong with this Law of the Horse, and everything right with teaching it, particularly through Cybersimulations. On the surface level of doctrine, Easterbrook may be superficially correct because cyberlaw may be scattered from the viewpoint of pre-existing categories of law. On a deeper level, cyberlaw is uniquely positioned as a tool for legal educators, especially when taught through simulations that permit learning beyond doctrine and theory, into a mix of skills and values that help to create a meaningful capstone transition from law school to practice. Accordingly, cyberlaw is no mere "Law of the Horse," but instead a unique opportunity for legal educators to unify and illuminate both the law, and cyberlaw, for today's law students.

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separate article that explores the benefits of role-plays, as well as the trade-offs for students, teacher-scholars, and law schools. *See* Nathenson, *Uncharted Waters*, *supra* note 39 (draft).

370. *See* Lawrence Lessig, *Law Regulating Code Regulating Law*, 35 LOY. U. CHI. L.J. 1, 1 (2003). In response to Lessig's scholarship, Orin Kerr notes that "[b]y defending cyberlaw based on its similarities to the rest of law, rather than its differences, the argument implicitly concedes that nothing new happens when we apply law to the Internet." Kerr, *supra* note 19, at 380. Kerr suggests that "Internet law does offer something new—not so much in how we approach the law, but rather in the way that we approach the facts." *Id.* at 381.

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