

Technology-Based Experiential Learning: A Transnational Experiment

by Tahirih Lee

“...developing professional judgment takes a long time, as well as much experience.” —William M. Sullivan, et al.¹

Introduction

With law school applications in the United States down by half in less than a decade,² what better time to look outside the United States for ways to respond? The disappearance of applicants purportedly reflects widespread disaffection with legal education, principally its allegedly flaccid correspondence with what lawyers do.³ Institutions of higher learning around the world face the problem of linking their education to jobs, and many have responded with mandatory experiential components such as apprenticeships between school and employment. But a high level of coordination with government

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1. WILLIAM M. SULLIVAN, ET AL., *EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW* 115 (2007).
2. Ethan Bronner, *Law Schools' Applications Fall as Costs Rise and Jobs Are Cut*, N.Y. TIMES, Jan. 31, 2013, at A1.
3. Ethan Bronner, *A Call for Drastic Changes in Educating New Lawyers*, N.Y. TIMES, Feb. 11, 2013, at A11 (proposals to radically cut the J.D. program or infuse it with “more on-the-ground training” were prompted by “a sharp drop in law school applications, the outsourcing of research over the Internet, a glut of under-employed and indebted law school graduates and a high percentage of the legal needs of Americans going unmet.”); Bronner, *supra* note 2 at A1 (“We have a significant mismatch between demand and supply,” and “big corporations were dissatisfied with what they see as the overly academic training at elite law schools.”); John J. Farmer Jr., *To Practice Law, Apprentice First*, N.Y. TIMES, Feb. 18, 2013, at A17 (addressing the “existential crisis for legal education”); David Segal, *What They Don't Teach Law Students: Lawyering*, N.Y. TIMES, Nov. 11, 2011, at A1.

required by such apprenticeship systems puts them out of our reach.⁴ When the Shanghai University of International Business and Economics lost the Chinese government's support for internships in international trade for all the school's graduates, an enterprising faculty member, Zhu Wei, looked to technology for a solution and created a digital internship. Computerized games like his would provide experiential learning to American law students in a pedagogically controlled environment and remove most of the negative risks of their use of technology in the classroom, such as Web surfing and anonymous bullying.

Why turn to technology for ideas? It is not because the fastest-changing component of education in that decade was the use of technology to replace the

4. For example, before beginning the practice of law in France, a graduate from a law school there is required by national statute to complete 18 months of "practical training." Loi 91 1197 du 27 novembre 1991 d'organisant la profession d'avocat [Law 91-1197 of November 27, 1999 on Organizing the Legal Profession], JOURNAL OFFICIEL DE LA RÉPUBLIQUE FRANÇAISE [J.O.] [OFFICIAL GAZETTE OF FRANCE], Nov. 28, 1991, p. 15502. See EUROPEAN COMMISSION, LAWYERS TRAINING SYSTEMS IN THE EU: FRANCE (2014); CATHERINE ELLIOTT & CATHERINE VERNON, FRENCH LEGAL SYSTEM 210-19 (2000); *Les nouveaux Cahiers de doléances des Français*, MARIANNE, Aug. 29, 2014, at 29.

In Germany, upon completion of law school and a national examination, a prospective lawyer must undergo a two-year period of practical training, the Referendariat, in which students spend several months working in the courts, government, law firms and other positions. The German Law on the Judiciary mandates that law schools arrange these internships, whose details vary from state to state. See Deutsches Richtergesetz [German Judiciary Act], April 19, 1972, BfBl. I at 713, § 5b (Ger.); EUROPEAN COMMISSION, LAWYERS TRAINING SYSTEMS IN THE EU: GERMANY (2014); NIGEL FOSTER & SATISH SULE, GERMAN LEGAL SYSTEM AND LAWS 85 (3d ed. 2002).

Both tracks in the United Kingdom's law profession require two stages of practical training, both overseen by their respective bar associations. Barristers, after graduating from a university with an LL.B degree, take the "Bar Vocations Course," and then enter into a "pupillage." Solicitors take the "Legal Practice Course" for one year following law school and then a 2-year training contract. The Bar Training Regulations, THE BAR TRIBUNALS & ADJUDICATION SERVICE 7 (Sept. 2013), <http://www.tbta.org.uk/wp-content/uploads/2013/07/Bar-Training-Regulations-2013.pdf>; *SRA Training Regulations 2014*, SOLICITORS REGULATION AUTHORITY (July 1, 2014), <http://www.sra.org.uk/trainees/period-recognised-training.page>. See EUROPEAN COMMISSION, LAWYERS TRAINING SYSTEMS IN THE EU: ENGLAND & WALES (2014); *Pupillage*, THE BAR COUNCIL, <http://www.barcouncil.org.uk/becoming-a-barrister/how-to-become-a-barrister/pupillage/> (last visited Sept. 14, 2014); *Pupillage*, BAR STANDARDS BOARD, <https://www.barstandardsboard.org.uk/qualifying-as-a-barrister/pupillage/> (last visited Oct. 15, 2014).

notepad and pen,⁵ the book,⁶ the photocopy center,⁷ the overhead projector,⁸ the classroom, and the teacher.⁹ During that decade, technology, in the form especially of personal computers connected to the Internet, took hold of classrooms in American law schools. Despite calls for intelligent responses to it,¹⁰ the upsurge of machines in law school classrooms did not fundamentally change the way law teachers teach.¹¹ The most pronounced change wrought by increased access to the Internet has been to distance students from the traditional educational experience offered by their professors. If professors played a role in this distancing, it was one of enabler, by tolerating it.

Technology has not only failed to usher in improvements to legal education, its indiscriminate use is also responsible for a deterioration of the law school experience. Rampant abuses by students of technology have given it a bad reputation in legal academe.¹² I believe that the malaise of the surfing law student is one of the reasons that law schools have fallen prey to accusations

5. See Pamela Lysaught & Danielle Istl, *Integrating Technology: Teaching Students to Communicate in Another Medium*, 10 J. LEGAL WRITING INST. 163 (2004).
6. For discussions of electronic formats for reading in law schools, see Debra Moss Curtis & Judith R. Karp, *In a Case, On a Screen, Do They Remember What They've Seen? Critical Electronic Reading in the Law Classroom*, 30 HAMLINE L. REV. 247 (2007); Robert Laurence, *Casebooks are Toast*, 26 SEATTLE U. L. REV. 1 (2002).
7. See Joan MacLeod Heminway, *Caught in (or on) the Web: A Review of Course Management Systems for Legal Education*, 16 ALB. L.J. SCI. & TECH. 265 (2006); Marie Stefanini Newman, *Not the Evil TWEN: How Online Course Management Software Supports Non-Linear Learning in Law Schools*, 5 J. HIGH TECH. L. 183 (2005).
8. Apparently law professors use digital technology for displaying materials less extensively than professors in the other professional schools. See Fred Galves, *Will Video Kill the Radio Star? Visual Learning and the Use of Display Technology in the Law School Classroom*, 2004 U. ILL. J.L. TECH. & POL'Y 195, 203-04 (2004).
9. For an attempt to tailor pedagogy to an online format, see Joseph A. Rosenberg, *Confronting Clichés in Online Instruction: Using a Hybrid Model to Teach Lawyering Skills*, 12 SMU SCI. & TECH. L. REV. 19 (2008). For a discussion of law degrees offered entirely through online courses, see Andrew S. Rosen, *Concord University School of Law's On-line Law Degree Program*, 15 ST. JOHN'S J. LEGAL COMMENT. 311 (2001). For a brief report on the increasing number of individual online university-level courses, see Tamar Lewin, *Students Rush to Web Classes, But Profits May be Much Later*, N.Y. TIMES, Jan. 7, 2013, at A1 [hereinafter Lewin, *Students Rush to Web Classes*]; Tamar Lewin, *Universities Abroad Join Partnerships on the Web*, N.Y. TIMES, Feb. 21, 2013, at A18 (Coursera added 29 universities from around the world to its consortium of developers of free online courses).
10. For prominent examples of such clarion calls, see Paul L. Caron & Rafael Gely, *Taking Back the Law School Classroom: Using Technology to Foster Active Student Learning*, 54 J. LEGAL EDUC. 551, 554-56 (2004); Diana R. Donahoe, *An Autobiography of a Digital Idea: From Waging War Against Laptops to Engaging Students with Laptops*, 59 J. LEGAL EDUC. 485 (2010).
11. See Caron & Gely, *supra* note 10, at 554-56 (two law professors describe as widespread the kind of watered-down Socratic method that is still used today, while students distanced themselves from the dialogue in class by escaping into the Internet).
12. For a discussion of this negative reputation, see Kristen E. Murray, *Let Them Use Laptops: Debunking the Assumptions Underlying the Debate Over Laptops in the Classroom*, 36 OKLA. CITY U. L. REV. 185 (2011).

of abandoning their mission to train lawyers. When critics lament that law professors are too “theoretical,”¹³ which is far from the truth at most law schools, what they may mean is that law students do not feel engaged by their classes. Simultaneously performing class-related and non-class-related tasks in class dilutes the learning experience and leaves students less equipped to practice law.¹⁴ The haphazard and incomplete integration of technology into the classroom lowers the expectations of students. Students roaming around on the Internet without having to put their computers to good use creates an impression of wasted time that stretches throughout legal education, the memory of which surely carries into life on the bench and at the bar and dims the views of these legal professionals about the quality of legal education.

This current state of affairs can be remedied by a contraction of the liberty afforded to each law school student. As much as possible, students must be prevented from creating their own personalized educational experience and from using technology to isolate themselves. Isolation results from a student’s indiscriminate use of technology, which is tolerated by law school teachers and administrators possibly in the pursuit of goals unrelated to sound pedagogy, such as budget cuts, or expanding access to legal education through distance learning,¹⁵ or appeasing students in exchange for high scores on teaching evaluations, or creating an impression of high-tech for the rankings race. The law teacher who allows students to touch technology in the classroom must turn it into a gateway to a comprehensive, demanding, collaborative, and all-consuming interactive experience that stimulates learning of key skills.¹⁶ Trends in technology generally, and those pioneered by educators right now, including videoconferencing and distance learning that connects live classes to remote guest speakers or students,¹⁷ point the way toward ways to improve

13. A stinging rebuke along these lines was published on the front page of *The New York Times* near the end of 2011. See Segal, *supra* note 3.
14. For an observation of student surfing the Web and other electronic pastimes in the classroom, see Diana R. Donahoe, *supra* note 10.
15. See, e.g., Abigail Cahak, Note, *Beyond Brick-and-Mortar: How (Cautiously) Embracing Internet Law Schools Can Help Bridge the Legal Access Gap*, 2012 U. ILL. J.L. TECH. & POL’Y 495 (2012). For an example of a call for distance learning to spread the influence of a particular area of U.S. law, see Michael L. Perlin, *An Internet-Based Mental Disability Law Program: Implications for Social Change in Nations with Developing Economies*, 30 FORDHAM INT’L L.J. 435 (2007).
16. The current use of tech as escape from learning the law should not mask the virtues of tech for transforming legal education to meet the needs of a changing world. Getting rid of personal computers—and whatever smaller devices will succeed them—is not a solution, as students today are dependent upon them for a range of scholastic tasks, and personal electronic devices are integral to the practice of law. For an extended argument that today’s law students and lawyers access the law in ways that technology has fundamentally altered from several decades ago, see Diana R. Donahoe, *Bridging the Digital Divide Between Law Professor and Law Student*, 5 VA. J.L. & TECH 13 (2000).
17. Offering entire law courses online, which is called “distance learning,” depending on how it’s done can either distance students from teachers or, by using videoconferencing and Skype, enrich the interactions of students with students and teachers in remote locations without removing the primary teacher from the classroom. Examples of the former abound. For a

rather than degrade that experience. And yet none of them ensures a use of technology that, first, inhibits anonymity, and, second, minimizes students' freedom and discretion.

Decreasing the distance between students and teachers, and among students, and thrusting them into situations where they must apply what they have learned, are important parts of reining in pupils' freedom and discretion to levels where they do not interfere with learning, and digital games are particularly well-suited to this. This is what Professor Zhu Wei at the Shanghai University of International Business and Economics, and I at Florida State University College of Law, have been undertaking together since 2001, in a course that we jointly teach on international trade transactions.¹⁸ Known as the International Trade Simulation, or ITS, it is the first and still only computerized simulation of international trade transactions offered in a law school in the United States.¹⁹ In a simulated environment that can be accessed on our server,

description and an analysis of an early example of the latter, *see* Helen Leskovic, *Distance Learning in Legal Education: Implications of Frame Relay Videoconferencing*, 8 ALB. L.J. SCI. & TECH. 305 (1998). Other innovators have used videoconferencing to link their U.S.-based law class with a law class in another country. Sandy D'Alemberte and Terry Coonan at the FSU College of Law do this with classes in Russia, as did Chuck Irish, head of the University of Wisconsin's East Asian Legal Studies Center through 2011.

18. *See* Part III, *infra*.
19. Of course, Professor Zhu Wei and I are not alone in trying to use technology to improve legal education. A vanguard of law teachers in the United States, working for the most part independently, have devoted untold hours and years to innovating with technology to improve legal education. Foremost among them would have to be the creators of CALI, the major resource for computer-based learning in American law schools. Thirty-five years ago, Roger Park and Russell Burris, while describing their work on computer-based exercises, posited that computer-based simulations were possible. For this idea, and a history of the early years of CALI and the larger movement that gave birth to it, written by its innovators, *see* Roger Park & Russell Burris, *Computer-Aided Instruction in Law: Theories, Techniques, and Trepidations*, 1978 AM. B. FOUND. RES. J. 1 (1978). For a brief description of CALI's genesis and its results through the mid-1990s, *see* Michael A. Geist, *Where Can You Go Today?: The Computerization of Legal Education From Workbooks to the Web*, 11 HARV. J.L. & TECH. 141, 144 (1997) (concluding that the movement to add computerized exercises to law classrooms "has never achieved the promise envisioned by its proponents . . ."); Shelley Ross Saxer, *One Professor's Approach to Increasing Technology Use in Legal Education*, 6 RICH. J.L. & TECH. 21, 28 (1999) (these computer-based exercises help students achieve an understanding of "black letter law" with less instructional time put in by the teacher, but they do not "significantly" help students "think independently" or "understand[s] the rationales underlying the law." What is more, "[s]ome educators believe that these exercises may actually work against these larger legal education goals . . ."). Diana Donahoe created an e-book whose links to videos allow students to "listen to real oral arguments" and testimonials of alumni of the course, "see sample pages [of secondary sources], move their mouse over them to find annotations and references, and do exercises to test their knowledge and use of those materials." *See* Donahoe, *supra* note 10, at 503. Kathleen Elliott Vinson's proposal to supplement courses' written materials with podcasts is creative and forward-looking. *See* Kathleen Elliott Vinson, *What's on Your Playlist? The Power of Podcasts as a Pedagogical Tool*, 2009 U. ILL. J.L. TECH. & POL'Y 405 (2009). These innovations push the needle from passive toward active learning and thereby can be seen as preliminary steps in the direction toward courses that offer a comprehensive professional experience. But no one would argue that these programs increase the interaction between

this software package, accompanied by strategically used videoconferencing and online messaging, provides a 2½-month experience of the international business world. Professor Zhu developed this software package, and several others, and then built teams of teachers to play roles within this simulated world and to monitor the progress of the students. Thousands of students in China and Taiwan have completed these courses, as well as hundreds of FSU students. This makes ITS an example of Chinese innovation and a foreign influence on American legal education.

Experiencing the demands placed upon lawyers in various contexts and learning to identify the opportunities to meet those demands does not form the bulk of legal education now. The case-oriented dialogue may, in its pure form, chart the best course for mastering the manipulation of judge-made law.²⁰ But even if this method were expertly practiced by law teachers today, it prepares law students to practice in a common-law-centric world that no longer exists. Most of the world's governments do not recognize judge-made law nor tolerate creative statutory interpretation, and arbitral bodies are free to ignore these as well. Lawyers today help their clients best if they can use cultural knowledge to navigate through institutions,²¹ only a minority of which are judicial. Legal work in the United States is primarily transactional, the success of which is measured in the ability to offer strategic advice to clients to help them avoid legal problems, rather than in waiting to step in to adjudicate already complex and entrenched problems with the transactions when helpful and satisfying solutions are beyond reach.

Transactional work is best learned when dropped into typical situations in the most typical types of transactions and becoming practiced at identifying the options that can and should be pursued. Immersion in actual transactions is not as helpful as in simulated ones, because actual situations are unpredictable: No client would allow a student to make important decisions for it, and personalized coaching is difficult during key moments in real-life transactions. Actors in an ongoing transaction cannot devote enough of their time and attention to the student. The law student thus becomes sidelined and passive, missing out on the crucial learning that happens by doing.

Personal coaching is indispensable to law students and, I have found in my two decades of law teaching, is superior to large class lecture and even Socratic-style dialogue, because the teacher can tailor the teaching to the specific needs of each student. Students benefit also because they can more easily and immediately in this private setting, with its informality and quick back-and-forth, integrate what the teacher offers into their own learning experience. In the context of a digital game, personal coaching works particularly well,

teacher and student, or by themselves provide a comprehensive professional experience.

20. For the most persuasive argument that it does, see SULLIVAN ET AL., *supra* note 1, at 115.

21. Stanley Lubman argued that Chinese law is primarily institutional in nature. See STANLEY LUBMAN, *BIRD IN A CAGE: LEGAL REFORM IN CHINA AFTER MAO* (1999).

because students must continuously perform, which creates a sense of urgency that opens the student to the coaching.

Not everyone believes that legal education must be revamped. Erudite law scholars challenge the notion that law schools' main function is to prepare people to be ready on Day 1 to perform all the discrete tasks that lawyers perform on a day-to-day basis. Rather, goes this view, law schools do best to continue what we are already doing, namely, helping students think more analytically and rigorously about statutes and judicial opinions. Each legal argument benefits, such proponents would say, from a grounding in a larger picture of the legal terrain.²² I agree with this view, insofar as it describes an ideal that law teachers should strive for. What is the larger legal terrain these days? It includes transnational business transactions in which statutes and case law play a minimal role, but in which contract negotiation is continuous and thickets of procedures of private institutions must be navigated.

Part I of this article draws a picture of the future of American law schools, one in which the present trend of indiscriminate use of personal computers will drive those schools that permit it to extinction. I describe a world where heightened competition among law schools and scarcer public funding shuts most schools. The increasing flow of information about the job market and what law schools offer to students makes pedagogical innovation the currency of the realm. The schools that survive do so by virtue of the effectiveness of their training of their students, which includes connecting students to future employers and clients.

Research on technology in the classroom and workplace reinforces the notion that, when updating legal education, things can go badly wrong if technology is misused. In Part II, I summarize some recent findings to assert that technology, used without careful thought and construction to suit the law school curriculum, is not a panacea. Indeed, it may be a detriment to our moving forward because it provides a false sense of progress. I also argue that the ways in which law teachers have already tried to incorporate experiential learning into the curriculum, with or without technology, have not delivered an in-depth and comprehensive professional experience; rather, they have fostered anonymity and freedom, twin evils in the classroom, and our use of technology has expanded the territory within which these evils may do their corrosive damage. To support these arguments, I offer anecdotes culled from my three decades spent in five law schools as a law student or law professor. My experience includes a couple of my own radical experiments with technology, born of equal parts Forrest Gump-like serendipity and perennial hopefulness about technology's promise.

In Part III, I describe an example of the approach to learning used by our ITS team that does deliver an in-depth and comprehensive professional experience, one that combats the twin evils of student freedom and isolation. Nine times I have co-taught ITS, our class that uses an extensive computer-

22. See SULLIVAN ET AL., *supra* note 1, at 115; Rob Atkinson, *Law as a Learned Profession: The Forgotten Mission Field of the Professionalism Movement*, 52 S.C. L. REV. 621 (2001).

based simulation that continuously connects students and teachers in four countries. ITS required many years of dedicated work to build, governmental start-up funds (from the Shanghai Municipal Government), coordination of a team of teachers behind the scenes, and plenty of one-on-one coaching from this team to guide each cohort of students through to the end of the course. When students reach the end and see what they can do, however, the results are exhilarating for both students and teachers, a significant return on all that investment and expenditure of time and money.

I conclude with caveats about my predictions about technology's future role in legal education. Despite the gale-level forces moving law schools to change, the destiny of American law schools is, at least in part, in our hands. I do not pretend that, even if sufficient funds do become available, technology-based simulations, no matter how elaborate, are the answer to all of American legal academia's present woes. This technology-based simulation course is an example, however, of a use of technology in the classroom that in specific ways directs students to establish a professional identity and a personal record of growth before they obtain their law degree. It also restores the interactive community that the internet and electronic pastimes have all but destroyed in the law school classroom. Updating legal education must include finding ways to turn around these corrosive trends.

I. Law Schools in Twenty Years

The signs are all around us. The demand for legal education is trending away from domestic court case analysis and toward transactional training. Domestic litigation is becoming subsumed within alternative and transnational dispute resolution.²³ This trend is pressing law schools away from teaching and researching law as a highly defined and separate discipline, away from transactions that are rooted only in one country, and away from a single law degree for all practitioners.

Two decades from now, most law schools now operating in the United States will have closed, survived by a few dozen institutions, not necessarily based in the United States. These institutions offer intensive and very expensive training to a small, privileged group of people already embarked upon careers in global business. These people are trained to be global transactional lawyers who perform complex problem-solving for a variety of multinational business clients. These programs look like a cross of boot camp, luxury spa, and aeronautic flight school. High-tech, globally interactive simulations of transactions absorb nearly all the time of the students. Culled from the world's elites, these students pay for the exorbitant cost of these programs mainly by contracting away future earnings and by promising to return periodically to the school for refresher courses and input as consultants into other courses.

23. See Marc Galanter, *The Vanishing Trial: An Examination of Trials and Related Matters in Federal and State Courts*, 1 J. EMPIRICAL LEGAL STUD. 459 (2004).

The quid pro quo includes options to live on campus in the twilight of their careers in exchange for mentoring students.

For periods of a few months, most of the program is held on site, in any one of the schools' satellite campuses in the major cities of the world.²⁴ The sessions are so intense that it is normal for students to go back into the work world for periods between each one to decompress and apply what they've learned. The sessions are akin to preparing a world-class athlete for a competitive event. Professors function like personal trainers or coaches, with lots of one-on-one contact with students. These sessions are highly personalized and geared toward guiding the students through complex simulations of transactions.

Groups of students in several of these global locations simultaneously enter the nearly three-dimensional simulations via a Wii-like setup, where bodily movements as well as speech are monitored and evaluated. Headsets like the ones developed by Oculus Rift surround each student with the sounds and "vivid, three-dimensional images"²⁵ of various moments in a transaction. Live audio and video connections, perhaps through a wearable computer like Google Glass,²⁶ allow students to communicate with fellow students and professors playing roles in the simulation from remote locations.

Within the simulation are scenarios that offer experiences so like what confronts international business lawyers that graduates of each series in the program will be ready to join teams that negotiate for multinational businesses. Their skills will be updated and sharpened in future stints on site and continuous access from a distance to online corollaries to the simulations.

A great bifurcation in legal education will have been completed,²⁷ with a second type of training available to anyone in the world for little cost. Offered

24. New York University already has 13 campuses outside the United States, including the one soon to open in Shanghai. See Ariel Kaminer, *N.Y.U.'s Global Leader is Tested by Faculty at Home*, N.Y. TIMES, Mar. 10, 2013, at MB1.
25. Nick Wingfield, *A Matter of Perception*, N.Y. TIMES, Feb. 17, 2013, at B1, B4.
26. This product now being sold by Google is a computer integrated into a pair of eyeglass-like frames. See GOOGLE GLASS, <http://www.google.com/glass/start/what-it-does/>. It should not surprise us that much of the technology that will be used by law schools will be attached to the body in some way. Already we lash ourselves to our phones and tether ourselves to our flash drives. Taking this trend of progressive intimacy between humans and technology, microchips surgically implanted into each law student may not be far off.
27. David Van Zandt, Dean of Northwestern University Law School, presciently alluded to this possibility in an address at Southwestern University Law School. See David Van Zandt, *The Evolution of J.D. Programs—Is Non-Traditional Becoming More Traditional?*: Keynote Address Transcript, 38 SW. L. REV 607, 610 (2009) (although "legal education remains focused on the 'one-size-fits-all' idea of preparing students who can do any type of legal work," full-time salaries of new lawyers showed not one, but two, spikes, the lower salary spike less than half of the higher one. The fact that the average starting salary for lawyers in private law practice has fallen by 35 percent in the past four years may more than likely represent a more substantial dip for some new lawyers than others). See also Rick Schmitt, *Price and Perils of JD: Is Law School Worth It?*, 27 WASHINGTON LAW. 22, 24 (2013).

completely online,²⁸ these programs will certify students in simple document drafting to meet the personal needs of clients in each recognized jurisdiction of the world who have limited ability to pay. The graduates of these programs will work in jobs akin to notaries or paralegals-plus, similar to the document drafting and negotiating done twenty years earlier by non-lawyers skilled in business.²⁹ From remote locations, professors will assist students online when they have questions, and some professors will be involved in the creation of the programs and their refinement.³⁰

With such onerous teaching loads, will law professors abandon research? The episodic nature of these simulations should free professors in the elite programs to leave the teaching sites for periods to engage in research. As with the teaching, the research will be altered by pressures from students and employers. Law professors will do less reading and analyzing of court cases and law review articles and more fieldwork of the kind sociologists and anthropologists do. Embedded in the practice of law or in institutional settings where law is drafted, enacted, and enforced, law professors will collect and analyze data and establish far-flung connections in the personal world. They will not be practitioners, but intelligent observers of practitioners. In order to conduct such research, they will be multilingual and interdisciplinary.

28. Nearly a decade and a half ago, Stephen M. Johnson surmised that technology would not substantially change the way law is taught, but predicted that each law school would develop fully online courses to educate the non-matriculated public. See Stephen M. Johnson, *www.lawschool.edu: Legal Education in the Digital Age*, 2000 WIS. L. REV. 85, 124 (2000). Law schools that continue to use scholars to educate students on site, however, will probably find themselves unable to fund the development of such online courses without significantly increasing tuition for the on-site students. Even if a fee could be charged for the courses, as Professor Johnson posited thirteen years ago would be possible if necessary, substantial funds would have to be invested long before the fees came in. See *id.* at 124. Institutions that have to start from scratch would thereby impoverish initiatives to update the on-site legal education.
29. Some commercial contracting and negotiation is conducted by non-lawyers. See Thomas D. Morgan, *The Changing Face of Legal Education: Its Impact on What it Means to be a Lawyer*, 45 AKRON L. REV. 811, 818 (2012).
30. Substituting computer-based lectures and exercises for live teachers is popular already for law school degree programs that target people who cannot afford to suspend their paying jobs to pursue the law degree. See Joyce D. Saltalamachia, *Podcasts, PowerPoint, and Pedagogy: Using Technology to Teach the Part-Time Student*, 53 N.Y.L. SCH. L. REV. 893 (2008-2009). The wholly Internet-based law school Concord by the Kaplan company, also seems to be recruiting students from lower-income populations. See Robert E. Oliphant, *Will Internet Driven Concord University Law School Revolutionize Traditional Law School Teaching?*, 27 WM. MITCHELL L. REV. 841 (2000). Whether commercial businesses or long-established universities will run these programs is hard to tell at this point. "Coursera," a private company run by academics, is proliferating wholly online university courses around the world by serving as a clearinghouse and basic facilitator. See Lewin, *Students Rush to Web Classes*, *supra* note 9. Thus it is a kind of hybrid of corporate and academic institutions.

II. Why More Technology in the Classroom has not Fulfilled the Needs of Students, Employers, and Clients

No doubt many of our colleagues' innovations in teaching technology have enhanced the learning experience. Yet these uses in the classroom of technology, both display and interactive, adopted since we opened up our classrooms to the Internet, all function like a Band-Aid on an open wound. They attempt, in short-lived and uncoordinated increments, to draw our students' attention back to the task at hand, without doing away with the source of the distraction itself.

Even success at drawing focus upon the subject of discussion amounts to a Pyrrhic victory, because such measures fall well short of delivering comprehensive and coherent learning experiences. Like the earlier, technology-free formats where live lectures dominated, PowerPoints and downloads from the Internet still relegate students to the passive position of an audience. Writing is disconnected from the lawyers' final product. Thinking and analysis expressed orally in class are divorced from the context within which lawyers operate. Students are left on their own to figure out how to take an active role in learning.³¹ They do not piece together fragments on their own and are nearly incapable of the deep thinking and complete focus required for legal problem-solving.³²

Law schools throughout the United States deliver doses of experiential learning through clinics; externships and internships; extracurricular competitions such as moot court, mock trial, and Jessup; and some of the practice-related classes taught by practitioners in the capacity of adjunct professor. Students flock to these experiences,³³ potential employers demand more of them,³⁴ and law deans are expanding such offerings.³⁵ In clinics, however, rarely are the clients the type that provide the bulk of legal fees in the world of practice and will bring funding into the law school, now as donors or in the future in the role of the employers of alumni who donate. The learning experience in the clinics is unpredictable, its quality tied in part to chance and

31. Paul Caron and Rafael Gely argue that the Socratic method presupposes that students will learn on their own, and will figure out on their own how they should learn. *See* Caron & Gely, *supra* note 10, at 555.
32. A survey taken at Pace Law School found that its electronic blackboard did not conclusively improve teaching. *See* Newman, *supra* note 7, at 213.
33. *See* SULLIVAN ET AL., *supra* note 1, at 41 (interviews of CUNY's and NYU's law students showed that they thought highly of the clinics and aimed to enter them in their third year of law school); *Engaging Legal Education: Moving Beyond the Status Quo*, LEGAL SCHOOL SURVEY OF STUDENT ENGAGEMENT 15 (2006), http://lssse.iub.edu/2006_Annual_Report/pdf/LSSSE_2006_Annual_Report.pdf (85 percent of 1Ls surveyed planned to participate or already had participated in a clinic or fieldwork; 64 percent of 3Ls reported that they were then participating or had already participated).
34. *See* Segal, *supra* note 3.
35. *See, e.g.*, Farmer, *supra* note 3 (Rutgers is soon to add a "postgraduate, nonprofit law clinic/firm staffed by recent graduates, under supervision . . .").

the availability of the supervising professor. In externships and internships, the student is in a lowly position, at best observing parts of the transactions or judicial cases, but rarely, if ever, faced with the key decisions that must be made and the multiple considerations that go into them.³⁶ An additional shortcoming with externships is that, at least for those in private law firms, the learning experience depends upon the time and attention that the supervising attorney can lavish upon the extern.³⁷ With ever more emphasis upon billable hours, the time that lawyers have to devote to activities that earn no money for the firm, such as public service and mentoring, is in short supply.

The Socratic method, a pure form of which was purportedly used throughout the United States earlier in the 20th century,³⁸ offered each student an experience of performing a logic-driven analysis of appellate case law. The teacher would lead the student down a path toward greater depth of reasoning. Even classmates who were merely listening were supposed to experience the journey by putting themselves, in their own minds, in the position of the dialoguing student. Jumping from student to student while everyone listened and was poised to participate, the professor would create an interactive community with no private space for students to hide or zone out or opt out. Attention was held by allowing each student to discover for himself (there were rarely any women) what the law was. But even these experiences were lived primarily by observing the example of the all-knowing teacher. It was largely an experience of witnessing a model. And this ideal was probably not always achieved. As a contemporary and outside observer wrote at the time, the method was “hard to carry through to the end even in the universities of the United States. . . .”³⁹ While the case method was the ideal at Harvard,

36. Interview with Amber Drummond, Extern, U.S. Attorney’s Office, in Tallahassee, Fla. (Feb. 22, 2013). A 3L at Florida State University College of Law, Amber professed complete satisfaction with the externship, and it was obvious that her observations there had increased her respect for the work of the U.S. Attorney.

37. One advocate of externships in law firms asserts that the extern’s experience depends upon the supervising attorney. See James Backman, *Externships and the New Lawyer Mentoring: The Practicing Lawyer’s Role in Educating New Lawyers*, 24 *BYU J. PUB. L.* 65, 114 (2009) (“The key to the law school apprenticeship externship and the new lawyer’s first year of guided learning is the practicing attorney. The voluntary involvement of the lawyer as the externship student’s supervisor and through the teaching role taken on without cost by the new lawyer’s attorney . . .”).

38. See ROBERT STEVENS, *LAW SCHOOL: LEGAL EDUCATION IN AMERICA FROM THE 1850S TO THE 1980S* 36-42 (1983). Harvard hired a new breed of law professor who were more academically than practically oriented, who were experts not in the practice of law but “experience in learning of law,” emphasized the well-known founder of this case-based method, Christopher Columbus Langdell. See *id.* at 38.

39. Edouard Lambert & Max J. Wasserman, *The Case Method in Canada and the Possibilities of its Adaptation to the Civil Law*, 39 *YALE L. J.* 1, 3 (1929). Lambert’s critique of the Socratic method was not just sour grapes from a continent-based comparativist worried about predatory moves by North American jurists. As a founder of a school of comparative law in Lyon, France, he purported to be open to the international spread of the method, but only if casebooks, bilingual in both English and French, at least for Canada and, presumably, France, included cases from civil law countries and a digestion of some statutory law from

teachers at Columbia and Yale, by the 1930s, were recasting their focus to methods from the social sciences.⁴⁰

What is more, even the case method, requiring semi-active participation of students at best, is no longer used without extensive supplementing by lecture, which, of course, reduces students to a passive position. Far from teaching theory, as asserted by some journalists and lawyers,⁴¹ practitioners of the Socratic method now water down the content of the subject matter and their teaching standards in an effort to become more concrete and practice-oriented.⁴² Lecturing is cookie dough, and question-answer dialogue is the chocolate chips, periodically studding the proceedings. A right or wrong answer is sought, clues are given in swift success so that the right answer is quickly produced, and the exchange ceases. Although this fosters passive rather than active learning, most of us do it, for a number of reasons.⁴³ As a century ago, little topical ground can be covered with the Socratic method, and coherence is a gratification that must be delayed.⁴⁴ Student evaluations, which play a role in the advancement of professors' careers, read more positively when students are happier, and students are on the whole happier when they are not challenged or asked to wait to feel competent. With lecture, students are lulled into a false sense of mastery. Lecture speeds up the voyage of discovery in the cases and therefore is also easier on the teacher,⁴⁵ who must spend ever more time on writing and publishing. The students' false sense of accomplishment means fewer questions, fewer office hours, and fewer complaints and angst-ridden discussions about grades and performance and expectations.⁴⁶

both common law and civil law countries. Lambert was an astute and informed outsider, well-positioned to critique the case method. *See id.* at 8.

40. *See* Laura Kalman, *The Dark Ages*, in *HISTORY OF THE YALE LAW SCHOOL: THE TRICENTENNIAL LECTURES* 154, 155 (Anthony T. Kronman ed., 2004).
41. *See* Segal *supra* note 3, (law schools are known for their long-standing emphasis on theoretical rather than practical knowledge).
42. The large-scale survey of law students conducted by Bryant Garth, et al., showed that fully “[f]our in five students said that their coursework substantially emphasized (“quite a bit” or “very much”) applying theories or concepts to practical problems or new situations.” *Engaging Legal Education: Moving Beyond the Status Quo*, *supra* note 33, at 10.
43. There are, no doubt, law professors who brilliantly deploy some version of the Socratic method to inculcate a deep understanding of the law and of how to use it, and there are law students who learn a great deal about the law from nearly any course. But the brilliant Socratic teachers and the successfully self-teaching students are too much in the minority to rest upon them the future success of legal education.
44. *See* Lambert & Wasserman, *supra* note 39, at 1-3 (“In reality the case method is a very slow teaching method.”).
45. *See id.* at 3-4 (“[T]he activity of the teacher using the case method is largely absorbed by the very great number of hours of work which this method imposes on him.”).
46. In the eyes of several influential law scholars who look down upon the case method, lecture is not a cheap substitute, but a helpful medium through which to dispense a great deal of distilled learning. Peter Birks, a renowned authority on restitution, believed that elaborate,

Since I entered law school as a student nearly thirty years ago, the predominant pedagogy in law schools has changed little,⁴⁷ mixing the famous Socratic-style dialogue between teacher and student with lecture. Even the pioneering CALI computer-based exercises for law classes did not aim to change the prevailing pedagogy. As early as the 1970s, Roger Park created exercises for applying the concepts introduced in Civil Procedure. “The ideal,” he wrote in 2004, “is creation of a classroom-like Socratic dialogue... [The exercises] cannot reproduce the spontaneity and flexibility of the live classroom, but they can be a useful supplement.”⁴⁸

Perhaps the proportion of lecture in that mix rose over that time, as teachers became subject to the results of student evaluations, which inevitably discouraged pressure from teachers toward more active learning. Another pressure toward lecture might be its utility in bringing in references to disciplines outside the strict confines of the law, to economics, sociology, and history, for example. Yet another force at work here might be the general convergence between the common law and civil law systems, as astutely noted by John Henry Merryman.⁴⁹ Such a convergence would logically include pedagogies in law schools. Whatever the reasons, however, the move toward lecture and away from an interactive dialogue did nothing to inhibit the freedom and anonymity of law students to drift from the task at hand.⁵⁰

hierarchical relationships defined each area of the law, and that this overarching structure gave vital meaning to every area of the law. See, e.g., Peter Birks, *Definition and Division: A Meditation on Institutes* 3.13, in *THE CLASSIFICATIONS OF OBLIGATIONS I* (Peter Birks ed., 1997). Mirjan Damaska developed an extensive critique of the common law system. In it, he argued that lectures allow a teacher to reveal the cathedral-like structure of a legal system, which cannot be seen through the haphazard, detail-oriented approach of the case method. For his most detailed analysis of common law systems, see MIRJAN R. DAMASKA, *THE FACES OF JUSTICE AND STATE AUTHORITY: A COMPARATIVE APPROACH TO THE LEGAL PROCESS* (1986).

47. Similar views about the lack of change in legal pedagogy were voiced several years ago. See SULLIVAN ET AL., *supra* note 1, at 76 (“[T]oday’s trend is to supplement rather than replace the inherited reliance on [the Socratic method].”); Camille Broussard, *Teaching With Technology: Is the Pedagogical Fulcrum Shifting?*, 53 N.Y.L. SCH. L. REV. 903 (2008-2009); Deborah J. Merritt, *Legal Education in the Age of Cognitive Science and Advanced Classroom Technology*, 14 B.U. J. SCI. & TECH. L. 39, 41 (2008).
48. ROGER C. PARK & DOUGLAS D. MCFARLAND, *COMPUTER-AIDED EXERCISES ON CIVIL PROCEDURE* vi (5th ed. 2004). For the 5th edition of his book Douglas McFarland added exercises to Roger’s. This statement by Park may embody a more conservative vision of what the computer-based exercises could do from the one he voiced with Russ Burris in 1978. It was possible that in a computer-run exercise they maintained in that earlier time, “the student sees actors perform the role of judge, jury, and lawyers. The student can be required to make decisions during the trial and communicate them to the computer. The computer could be programmed so that the student’s decision controls the subsequent video presentation.” Park & Burris, *supra* note 19, at 23-24.
49. JOHN HENRY MERRYMAN, *THE CIVIL LAW TRADITION: AN INTRODUCTION TO THE LEGAL SYSTEMS OF WESTERN EUROPE AND LATIN AMERICA* (2d ed. 1985).
50. Another way of describing these twin problems of too much freedom and anonymity by law students can be found in Rogelio Lasso, *From the Paper Chase to the Digital Chase: Technology and the Challenge of Teaching 21st Century Law Students*, 43 SANTA CLARA L. REV. 1, 27-28 (2002).

Given the increasing reliance on digital technology by our students year in and year out, it is tempting for teachers to believe that more acts of using digital technology, of any kind, will bring legal education in line with the needs of our students and their future employers and clients.⁵¹ But, I would argue, precisely the opposite has occurred. The technology we have allowed into our classrooms has driven a wedge between our students and the task at hand, and they are all the more poorly equipped to confront the demands of the practice of law as a result.

By the mid-1990s, electronic message boards were created for our students to post comments, and computer-based exercises supplemented the readings and discussions in the live classroom.⁵² Around the same time in the mid-1990s listservs started popping up, attracting law professors by the subject matter of their teaching and research specialties. New communities seemed to be forming around these new formats, and there was a sense of progress and improvement in the air.

I cannot remember the exact moment when I began to feel a kind of technology fatigue. My hard drive and file cabinets filled to bursting with printouts and digital files. Listservs and email drew us denizens of the law school away from conversations in the lunchroom and the corridors. On our electronic blackboards, students posted anonymous diatribes that vented pent-up grievances in the form of personal attacks. Reading and answering emails occupied hours per week, even per day,⁵³ and it interfered with the type of deep thinking that good legal scholarship requires.

Perhaps worst of all, my students, by the year 2000 required by our law school to buy a laptop computer, brought them to every class and surfed the Web instead of focusing on the material we were covering. The wireless environment of the campus opened up a large world to our students, and they, understandably, went out to explore. Even when I adopted a casebook with an electronic version, complete with hyperlinks to relevant legal sources, students did not embark on journeys down those virtual roads to broaden their civil procedure universe. Rather, the quality of our discussion and their exams and

51. For an example of such an argument, see Linda C. Fentiman, *A Distance Education Primer: Lessons From my Life as a Dot.edu Entrepreneur*, 6 N.C. J. L. & TECH. 41 (2004) (“Recognizing the extent to which law students and lawyers alike rely on the Internet in both their professional and personal lives, the American Bar Association (‘ABA’) has approved new standards for the J.D. curriculum which will greatly expand the opportunities for law students and lawyers to use the Internet to learn at a distance.”).

52. For a brief history of this initiative, pioneered by a collaboration between law faculty at Harvard and Minnesota, see Geist, *supra* note 19, at 146-57. As early as the 1970s, Roger Park and Russell Burris pioneered the use of computers for students to apply the concepts that they were introduced to in several common law subjects, like evidence, trusts and estates, and civil procedure. See Park & Burris, *supra* note 19. For a later version of the exercises he developed, see PARK & MCFARLAND, *supra* note 48.

53. Now people use emails to ask around if someone’s left their lights on in the parking lot, or if anyone in the building wants to go to lunch. Spamming has gotten worse. As the number of emails in my inbox grows, there still is no easy way to sort and manage them. See Jenna Wortham, *When E-Mail Turns from Delight to Deluge*, N.Y. TIMES, Feb. 10, 2013, at BU3.

research papers suffered from the digital distractions of websites and programs unrelated to litigation.

Many of my colleagues developed computer-based displays of diligently digested material from their courses to stimulate and guide their students. PowerPoint grew in popularity, but unfortunately too often morphed into a crib sheet more than an invitation to delve deeper into analysis. Graphs, photos, and video clips proliferated on the Internet and were easily downloadable onto the computer that projects onto the screen at the front of the classroom. Computer programs with exercises on law subjects could be purchased for use,⁵⁴ but with diminishing credits for first-year courses, it was difficult to find room for these additional materials.⁵⁵ But nothing in the accessible technology was more interactive than the live mock client interviews, depositions, and summary judgment hearings that I staged in class with the help of alumni and volunteers from the class. Programs and remote controls that allowed students to vote on questions posed by the teacher enticed students to participate more actively in their learning,⁵⁶ though in a semi-passive stance of answering questions posed by the teacher, and at a price deemed beyond the budget of our law school.

Distance learning programs are part of this problematic use of technology. After a period of skepticism, it is catching on now with universities because their administrations have finally identified a strategy that promises future earnings in excess of the significant upfront costs of launching and running these courses.⁵⁷ But such courses will not improve the quality of legal education if they simply provide learning tools for students to use in isolation, decreasing the contact with the teacher from traditional courses. Educators outside the law school are worried about the high attrition rates of students in purely online courses.⁵⁸ These online courses are caught on the horns of a dilemma: The more you attempt to make these courses more interactive by recreating as

54. See PARK & MCFARLAND, *supra* note 48.

55. Such difficulties, and others, with the exercises, were shared by others. See Geist, *supra* note 19, at 146-57.

56. Roger Park and Paul Caron have been proponents of this technology. See Caron & Gely, *supra* note 10; Roger Park, *Reflections on Teaching Evidence With an Audience Response System*, 75 BROOK. L. REV. 1315 (2010).

57. See Thomas L. Friedman, *The Professors' Big Stage*, N.Y. TIMES, Mar. 8, 2013, at A23 (highlighting this "MOOC revolution"). For a discussion of this skepticism and partial embrace by law schools of online law courses, see Robert J. Salzer, *Juris Doctor.Com: Are Full-Time Internet Law Schools the Beginning of the End for Traditional Legal Education?*, 12 COMMLAW CONSPICUOUS 10 (2004). For a discussion of the costs associated with creating and running an online course on health law nearly a decade ago, see Fentiman, *supra* note 51, at 61-65.

58. Editorial, *The Trouble with Online College*, N.Y. TIMES, Feb. 19, 2013, at A22.

much as possible a live classroom experience, linking students and teachers live by either video teleconferencing or discussion boards, the more you slow down the delivery of the material.⁵⁹ Distance courses are viewed primarily as a way to curtail the costs of legal education.⁶⁰

In sum, the ways in which law teachers already have tried to incorporate experiential learning into the curriculum, with or without technology, have not delivered an in-depth and comprehensive learning experience. Some uses of the technology have conserved the time of teachers, but added to the isolation and anonymity that law students already suffer from. Anonymity and freedom are twin evils in the classroom, and, perhaps unwittingly, our use of technology has expanded the territory within which these evils may do their corrosive work. A new use of technology, carefully crafted to deliver a personalized experience of the world of legal practice, is needed.

III. The International Trade Simulation

Approaching a crisis of confidence in computers in the classroom, in 2001 I found myself, on one of my regular research trips to China, discussing distance learning with a variety of academics. While in Shanghai I dropped by to see an acquaintance of mine, Zhu Zhaomin, in the law department at the Shanghai Institute of Foreign Trade. He introduced me to Zhu Wei, the founder of the Shanghai Collegiate Internship Center for International Business (SCICIB). “You must see the computer lab he has set up,” he insisted. I steeled myself for an afternoon parade through databases and gizmos.

What Zhu Wei showed me that day, however, opened my eyes to a new way of teaching. In a computer-based software platform, he had created a simulated universe which, in key respects, mimicked the world of international commodity traders. All the important players were present, including trading companies, international banks, carriers, insurance companies, manufacturers, and big-box retailers. Playing managers of small trading companies, students inserted themselves into a supply chain and negotiated their way to deals and profits, filling out contracts, bills of lading, applications for letters of credit,

59. One can infer this dilemma from the writing of an advocate of distance learning courses in law. See Daniel C. Powell, *Five Recommendations to Law Schools Offering Legal Instruction over the Internet*, 11 J. TECH. L. & POL’Y 285, 298 (2006) (“The problem with web-conferencing is that the software design and the traffic on the common Internet make it too difficult for instructors and students to both communicate in actual time and to move between supporting documents. Instructors in a web conference have to teach and move through documents while processing web chat or audio questions that may arrive after they were relevant to the discussion. These delays on the common Internet along with those associated with clicking through links for documents disrupt the presentation of material and discussion of the subject matter. Similarly, live discussion boards and chat rooms also provide immediate access to instructors but do not provide a good venue for the entire class to participate.”). For a similar account, see Ellen S. Podgor, *Teaching a Live Synchronous Distance Learning Course: A Student Focused Approach*, 2006 U. ILL. J.L. TECH. & POL’Y 263, 270 (2006).
60. See Daniel J. Morrissey, *Saving Legal Education*, 56 J. LEGAL EDUC. 254 (2006) (distance education is offered as the primary way to save law schools from going out of business).

and a dozen other crucial legally significant forms along the way. Teachers played the roles of the large institutions.

The benefit to our students in the law school was obvious from the start. Their understanding of international trade transactions went beyond simply memorizing provisions of the CISG or court cases about carrier liability, the standard fare provided by casebooks on international business transactions for the past several decades. Now they would proactively find the opportunities to transact and shepherd the transaction from beginning to end. They learned how to move the deal forward in ways that complied with internationally recognized customs and private institutions that routinely finance and reduce the risk of the deal going bad. As lawyers, alums of this course would therefore be able to offer strategic advice to traders to help them avoid legal problems, rather than only wait to step in to adjudicate already complex and entrenched problems with the transaction at a time when truly helpful and satisfying solutions are beyond reach.

With the help of the Dean of the Florida State University College of Law, Donald Weidner, in 2001 we began to offer the course about once a year, and through the fall of 2012 have taught it seven times. Dean Weidner signed a cooperation agreement with the Shanghai Institute of Foreign Trade, which provided for free use by FSU of the software package developed by Professor Zhu and committed Professor Zhu's staff to full support of FSU in teaching the course and running the simulation from his SCICIB. The agreement also promised input from me of data on products manufactured in the United States and U.S. customs regulations, which I provided.

The course begins with a training period, where Professors Zhu Wei, accompanied in various semesters by his assistants Professor Cheng Jie and Professor Tan Ying, and I walk our students through the technical terms of international trade, the process of calculating prices of commodities and of insurance coverage for them during shipment, of shipping costs, the key terms for contracts for international sales of goods, and the options afforded by different kinds of bills of lading and means of payment. An operation guide summarizes much of this, so that during the simulation students can refer to it as well as to their notes. The nuts and bolts of trading are put in context with lectures surveying the history of China's experience with international trade and of China's trade law, and an introduction to the dynamics of negotiation and of communication within and among trading companies and between trading companies and other entities in an international supply chain, and of dispute resolution.

Meanwhile, students form their trading companies with classmates and create an identity and mission for the companies. For a fee, they register the name and address of the company and the names and positions held by each student, and attach a charter that details the range of responsibilities for operating the company each student expects to cover. They receive start-up capital and may take out loans at a modest interest rate. We show them where to find a list of fees, a catalog that serves as the universe of all commodities

that can be traded, and a posting that includes contact information for the major players in the United States, including the manufacturers, the retailers, the bank, the carrier, inland transportation, express mail, and the insurance company.

After a few weeks of training, the simulation begins, and students log on to the platform to begin their quest for deals, sales, and profits. Students search the simulation for leads to demand for imported or exported goods and follow up on those leads with letters of inquiry by email and Skype sessions. To drum up interest in the products that they sell, students may create advertisements, both written and video-based, and websites that catalog their goods. They sleuth out the contact information for Chinese and Taiwanese trading companies and email them letters of inquiry along with these ads. They very quickly develop organizational systems to handle the massive volume of correspondence.

Once the terms of a deal are agreed upon, the crux of the students' work lies in the computer platform, where they fill out contracts and execute them, fill out applications for various types of financing from the bank, apply for insurance coverage, book shipping space, and load the goods for export to be shipped or transport imported goods into their warehouses for domestic resale. Behind many of these processes lies a teacher, who, playing the role of bank, insurance company, carrier, and domestic purchaser, receives the application forms and other documents and scrutinizes them for accuracy and comprehensiveness. A back-and-forth may ensue between the institution and the student for an amendment to a document. Amendments cost the students not just time, but also money, in the form of fees to the institution that demands them. As in the real world of trade, delays in securing Letters of Credit before the expiration can nix all the potential profit on the deal.

Students themselves see the progress they make as the simulation moves along. The costly amendments to documents tend to be more frequent and lengthier in the beginning of the simulation when students are learning how to write the documents. As the steps in the transaction come to feel more routine to the student, the teachers, acting as the bank, the domestic buyer, and occasionally as trading companies, impose new demands that require research into the product or more complex calculations. The sums in the bank accounts of the trading companies serve as another benchmark of progress. The financial reports that students write in the last several weeks of the course break out the details of total sales and profits in a way that directly informs the students about how well they performed.

Supplementing the computer-based platform are weekly live video sessions that link students and teachers in Shanghai and Tallahassee in real time. All but one of these are devoted to bringing together the American, Chinese and Taiwanese students to negotiate terms of their imports and exports. In the final joint, live session, all students report to their company's board of directors about the trading activities for that quarter. The board is a panel of real traders or lawyers who work in international trade; some join us in our

studio in Tallahassee, others in the studio in Shanghai. The members of the Board delve into the fine points of the students' deals and help them see in retrospect how they could have better minimized the risk to the company.

About ten weeks of trading in the simulation culminates not just in that oral report, but also in a written financial report and a written summary of the operations of the company. I meet with individual companies throughout the semester to help them write these reports.⁶¹ We do at least one dry run of their oral presentation, followed by feedback from me on how better to address the concerns about productivity, understanding of trade terms, accuracy in calculations, market awareness and sensitivity, and effort. I meet with teams separately rather than with the class as a whole, because we discuss sensitive, proprietary information that would be valuable to competitors.

Most teams stumble onto challenges that require a rethinking of their company's charter and of the strategies initially agreed upon by the company's members. At such moments, I help the company conduct an internal review to root out hidden errors and misunderstandings about the transactions and their cultural context, so that the team can make adjustments while opportunities for trading remain. These interventions have always helped avoid a breakup of the team, which would inevitably lead to a loss of sales and profits. But several teams over the years that did not seek my counsel in time suffered breakdowns in collaboration that were felt in the bottom line. Usually the problem revolved around a disparity in the amount of work that team members were willing to take on. Accusations about failing to pull one's weight in the company flew, feelings were hurt, hopes dashed. In other cases, contrasting philosophies about negotiating slowed the productivity of the company, with mutual recriminations assigning blame for scaring off potential partners or allowing those partners to take advantage of the American company. An important part of the course is learning how to deal with such feelings, as one would have to in the world of practice, in a professional and team-oriented manner. Using the problems that the students are currently facing, I illustrate possible applications of collaborative negotiation skills in this cross-cultural context. Knowing that they are graded in part on how well they use these skills in solving their problems, and seeing the beneficial effect of a strategy for minimizing losses in the context of their own business dealings, students understand those strategies at a deeper level than mere lecture would allow.

The simulation creates nearly free-market conditions, which imposes enormous pressures on each of the companies to reduce profit margins. Over the years, my students have come up with creative responses to that pressure. The second time we ran the simulation, all of the students at FSU formed

61. The substantial survey of law students in 2006 headed by Bryant Garth found a strong connection between the amount of feedback students receive from teachers and the students' sense of progress: "Students who received prompt feedback from faculty reported greater gains in their ability to synthesize and apply concepts and ideas." *Engaging Legal Education: Moving Beyond the Status Quo*, *supra* note 33, at 11.

a cartel, motivated by the view that the Chinese students' aggressive and sophisticated bargaining proved them to be the real competitors of the FSU students' companies, and highly organized competitors, at that. Although that insight was a good one, the cartel fell apart a couple of weeks before the end of the course. A lack of internal transparency about the distribution of profits, the belated discovery of a lack of evenhandedness in doling out each company's responsibilities, and some free-riding by the self-appointed leaders of the cartel combined to deal fatal blows to the organization.⁶² Otherwise, FSU's students have avoided alliances, even in weaker forms. The FSU teams compete with one another for a finite number of deals, and this usually leads to a high degree of distrust among the teams.

To cope with the pressures of the market, some FSU students seek exclusive relationships with Chinese trading companies. During the training phase of the course, my lectures on communication and negotiation within Chinese business culture aim to equip our students with the means to build such relationships. Despite the information in these lectures, many FSU students enter the simulation believing that simply offering to engage in an exclusive relationship will automatically result in one. They are soon surprised at how many forms of exclusivity there are and are surprised at how difficult it is to form, in a free market, a truly exclusive business relationship. Their disappointment helps them absorb the lesson that exclusive relationships usually require deep trust built up over long periods of time using cues from their partners' culture. Misplaced trust leads to exploitation that saps the unwitting FSU students of time and money. The severity of such consequences drives home an appreciation of multiple meanings and intentions behind the words of their Chinese partners.

Shortening the distance between students and their foreign counterparts reduced our students' anonymity and freedom in very helpful ways. They could not afford to zone out or to multitask during the work of the simulation; otherwise, opportunities for sales would pass them by and profits would fail to materialize. Unprofessional behavior occurred in transparent settings, so that it could quickly be identified and corrected. FSU students benefited from meaningful interactions with the Chinese professors, who helped them not just with lectures but by giving personalized answers to our students' questions by email. FSU students received feedback from additional sources, namely me, the American professor, and entrepreneurs and lawyers who work in international trade. This multifaceted feedback broadened the students' experience of the skills that international commodities traders need. During dozens of hours of collaboration, Chinese students forged bonds with the FSU students that endured beyond the course. Many FSU students had epiphanies while interacting with the Chinese students, because they were able to experience the sophistication and intelligence of these counterparts and thereby gain an appreciation of them and use them as models for their

62. See Karma Dickens, "IndraNet Trading Company Operational Report Summary," (Dec. 13, 2002) (on file with author).

own work. Other epiphanies occurred while daily seeking strategies to help overcome problems with the language barrier and with the difference in time zones.

Zhu Wei's philosophy about education, developed over nearly thirty years, infuses the course. As he sees it, students will not be prepared for work in international business unless they have practiced working on the transactions themselves. Merely memorizing relevant terms and a list of steps in a transaction do not go far enough.⁶³ He developed this conviction out of his own experience. While a student at the Shanghai Institute of Foreign Trade (SIFT), he worked for six months as an intern in a government-run trading company that specialized in the export of down garments to the U.S. and Canada. China's vast national bureaucracy at the time included most of the trading companies throughout the country, and therefore these companies were not in a position to refuse these assignments, which were made for all students in China's several foreign trade universities. Professor Zhu learned a great deal that was essential to his later work for about three years as a trader for the Shanghai Stationery and Sporting Goods Import & Export Corporation and an additional two years as a manager for CITIC Tech Shanghai in charge of importing telecommunication equipment.⁶⁴

As China's trading companies were spun off from the government and privatized, the internships dried up, and graduates of China's foreign trade universities embarked upon their careers needing a great deal more training from their superiors. This is why, soon after he joined the faculty at SIFT, he founded SCICIB, whose staff of a dozen or so young, energetic teachers creates and teaches simulation-based courses in international trade. He sought and obtained funding from the Shanghai Municipal Council to develop several software packages that contain extensive simulations, one of a global supply chain that reaches between countries. Several hundred students have taken the ITS course since 1994.

At first, he developed a simulation that inserted a Chinese student into a Chinese trading company and took him or her through the steps of canned international trade transactions, with the foreign buyer played by the computer. To date, about 16,000 people have completed this course. Then he created an English version of that course in which a foreigner does the work of an intern in a Chinese trading company. About 1,000 French and German students have traveled to SCICIB's headquarters in western Shanghai to take this course,⁶⁵ an exodus that proves that the approach of this simulation has made SIFT attractive to European students looking for places to study in China.

63. Interview with Zhu Wei, Professor, Shanghai Inst. of Foreign Trade (SIFT), in Tallahassee, Fla. (Sept. 20, 2012).

64. See email from Zhu Wei, Professor, Shanghai Inst. of Foreign Trade (SIFT), to author (Mar. 3, 2013) (on file with author, 7:07PM).

65. See email from Zhu Wei, Professor, Shanghai Inst. of Foreign Trade (SIFT), to author (Mar. 3, 2013) (on file with author, 7:07PM).

Beginning in 1994, Professor Zhu began running a simulation on global supply chains in which Chinese students played traders in Chinese trading companies who connect with trading companies in the United States. His next goal was to find an American partner with whom to run this course, so that Chinese students could connect with American students. Once that goal was achieved in 2001, when FSU agreed to co-teach the ITS course with SCICIB, he set his sights on expanding the number of countries with schools participating in the course. In the fall of 2012, the highly reputed National Chengchi University of Taipei, Taiwan, joined in. With 600 students as alums of ITS⁶⁶ connected by their own website, it is exciting to think about the possibilities for the future of this course.

The significance of Zhu Wei's innovation extends not just to the improvement of education for thousands of Chinese hoping to work in international trade. The use of CTS and ITS by Americans, Europeans, and now Taiwanese and Canadians make the courses a rare example of China's influence on education outside its borders. A century ago, foreign jurists founded a law school in Shanghai that used the case method to teach Anglo-American common law to Chinese students. This school inspired the founding of several law schools by Chinese educators who adopted a Continental European model of legal education. The deep imprint of foreign influence was humiliating to many Chinese for generations, as indigenous models for legal education failed to develop through the mid-20th century.⁶⁷ Foreign missionaries established dozens of schools in China during the late 19th and early 20th century⁶⁸ that served as the foundations for the system of higher education in the People's Republic of China long after the Chinese Communist Party took over its governance in 1949. These universities are today the preeminent ones in the country. The spread of Professor Zhu's simulation courses outside of China is nothing less than a reversal of a century-old trend of a profound reception of foreign influence on China's educational system.

My more than twenty years in law teaching have shown me plenty of examples that back up Professor Zhu's philosophy. I have observed countless students profess that they understood what they read or heard in a Socratic-style session, supplemented by written hypothetical exercises, but then found that they did not understand it deeply enough to use it themselves, whether that be in a classic essay examination, or in drafting a complaint or an internal legal memorandum, or when researching a matter in legal practice. In the International Trade Simulation, the students experience that moment when they first notice the shortcomings in their knowledge, and then the experience

66. See email from Zhu Wei, Professor, Shanghai Inst. of Foreign Trade (SIFT), to author (Mar. 3, 2013, 7:07PM) (on file with author).

67. For a description of these foreign-influenced law schools, see Tahiri V. Lee, *Oriental Lawyers at China's International Tribunals Before 1949*, 27 MD J. INT'L L. 179 (2012).

68. For a description of the dozens of religious schools and educational organizations founded by Americans and Europeans in Shanghai between 1840 and 1940, see SHANGHAI ZONGJIAO SHI [A HISTORY OF SHANGHAI'S RELIGIONS] 684-728 (1992).

of what can be done about it. Alums routinely report to me that they learned more in this class than in any other.

IV. Conclusion: Let's Invest in Technology-Based Experiential Learning

With the calls for experiential learning growing more insistent, now is the time to invest in the development of digital game-based courses in law that offer comprehensive professional experiences. Technological tools provide several advantages over the real-life experience-based learning opportunities found in apprenticeships, internships, externships, and clinics. With computer-run platforms, professors can create environments where the student's experience is controlled, and where the student has more opportunities to practice professional skills and less freedom to be distracted by unrelated matters. The environment can also be comprehensive, covering a broad range of matters encountered by a lawyer. The professors running the course are themselves not distracted by the pressures of their own legal practice away from the main task of coaching the student through the experience, as is the case where the only supervisor is a practicing attorney. To offer this type of learning, let us restructure our idea of the "classroom," require more work in the form of performance from each student, and augment the amount and frequency of feedback from the teacher. The classroom becomes a globally connected game that is run 24/7 for a specified period. The student performs multiple ongoing tasks at increasingly greater levels of difficulty. The teacher serves as a personal coach or trainer, preparing the student in one-on-one sessions for higher levels of achievement.

Litigation-related legal arguments and boilerplate forms are the two areas of legal practice that are drying up in the United States, resulting from outsourcing, increasing deference by courts to alternative dispute resolution, and caps on tort recovery imposed by state legislators and upheld by courts.⁶⁹ Future employers and clients are businesses working in a global environment. To better serve them, our students need to experience the difficulties encountered by those clients. To mirror the practice of law, the law curriculum must extensively incorporate global linkages into each subject. The Socratic method, whether in diluted form or not, does not lend itself to the teaching

69. See Galanter, *supra* note 23; Segal, *supra* note 3 (law firms in the United States have seen "a historic decline in hiring."). For several case studies that show a globalization of services. See Anupam Chander, *Trade 2.0*, 34 YALE J. INT'L L. 281 (2009). Some law educators, about six years ago, saw it quite differently, concluding that "American society has become more dependent on the legal profession for its functioning than ever before." See SULLIVAN ET AL., *supra* note 1, at 1. As the book was written on the eve of the global economic downturn, when applications to law schools were still increasing, perhaps the authors' appreciation of the hard work of law professors allowed them to assume that their efforts were resulting in well-trained lawyers and a broad swath of society willing to pay top dollar for their services. A more pessimistic view was voiced just three years later. See David Barnhizer, *Redesigning the American Law School*, 2010 MICH. ST. L. REV. 249 (2010). Barnhizer asserts that "logic suggests strongly that there are too many lawyers in the United States," *id.* at 283, and predicts "increasing pressures from non-traditional competitive sources without traditional law degrees to have a share in the business that has been limited to licensed lawyers." *Id.* at 256.

of transactional work or to law outside of common law jurisdictions where the application of law is rarely performed in a judicial and adjudicative context.⁷⁰ A new method must be found to teach most of the areas of law that now predominate in practice.

This vision of the future of law schools, where an elite minority of those seeking to practice law is subjected to elaborately prepared simulations that depend upon sophisticated technology and global networks, and where the content of the courses focuses upon international business transactions, might look dystopian. If so, then the sooner we legal educators join together to update our pedagogy, the more control over our curriculum we can salvage. We can make our own destiny, at least within the room still open to us in the space left by the massive forces acting upon law schools, such as globalization, the privatization of dispute resolution, and the increased stratification, commercialization, and specialization of the practice of law. For example, we can choose to invest in courses that will prepare advocates to represent marginalized people and to combat global warming. We can forge alliances with courts and government officials to reverse trends away from public dispute resolution. But none of this can hope to preserve elite jobs outside of international business without developing extensive experiential learning opportunities for these areas of the law. I do not believe that such opportunities will win law schools financial backing sufficient to sustain them over the long haul without using sophisticated technology in a deliberate way.

With scrutiny from the legal profession and potential applications steadily increasing, law schools that do not provide rigorous and comprehensive experiential learning opportunities will not survive. Technology has increased the flow of information, more than just the information about reputation, to encompass details about job prospects and what students actually learn, so that prospective students are becoming savvier when choosing a law school. The U.S. News & World Report rankings, and others, will lose their *raison d'être* because prospective students and donors will have access to much more detailed information about the operations and outcomes of each school. Already this is pushing law schools to tout virtues of connections to job-offering alumni and skill-building courses that will make students more attractive to potential employers. Technology-based simulations are a logical and promising development of this trend.

70. For a lengthy development of this insight, see DAMASKA, *supra* note 46.