INNOVATIVE TRANSACTIONAL PEDAGOGIES

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JOAN MACLEOD HEMINWAY

CORPORATE FINANCE AS ADVANCED CONTRACT DRAFTING

Our law schools are embracing in a more powerful way innovative transactional pedagogies that address not only theory, policy, and doctrine, but also legal skills. Along these lines, I think it is important to talk about Corporate Finance as an advanced contract drafting class. I view the Corporate Finance course in the law school curriculum in a very particular way: as a course focusing on an established area of legal practice. Accordingly, I teach Corporate Finance as a non-doctrinal course. I do teach doctrine in the course, don't get me wrong. For me, however, Corporate Finance best makes sense for law students as an applied course, which is why I teach it as a planning and drafting class. In my presentation, I want to focus on two principal things, broken out in multiple parts below. First, I want to talk about the nature of the course I teach, so that you have some specifics as a foundation. Some of this may be very basic for you. I think it is important, however, to spend a bit of time describing some things that relate to the general subject matter and teaching methods and tools involved in the course. Then, I will describe and illustrate the operation of the pedagogy I use in this course—employing IRAC[4] as a contract-drafting tool—and conclude with a specific example from the course.

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[4] "On a basic level, IRAC is simply an acronym for organizing a legal argument that involves a description of the Issue; an explanation of the legal Rule; an Application of that rule to the facts of the case; and finally, a statement of your Conclusion." Jeffrey Metzler, *The Importance of IRAC and Legal Writing*, 80 U. DET. MERCY L. REV. 501, 501 (2003).

Basic Course Information

My Corporate Finance course is limited to twenty students, and the prerequisite for the course is Business Associations, our general course on sole proprietorships, unincorporated business entities, and corporations. Also, it is very helpful for the students in my class to have (as a pre-requisite or co-requisite) Contract Drafting, which is a course that we offer every semester at The University of Tennessee College of Law. As detailed in my course syllabus, my objective in the course has grown and blossomed into, I hope, a flower (as opposed to a shrub) after ten years of teaching the course. This is what I tell my students the course objective is:

> In this course the students are exposed to law, regulations, and transaction documents and practice skills impacting the formation, utilization, and investment of capital in business enterprises. The course is designed to prepare students to act as creative advisors, decision makers, and legal draftspersons in one or more areas of corporate finance practice. [I list a few in a parenthetical.] As a result, in many class exercises and interactions, we model a law office or department in which class members collaborate as co-counsel to achieve results for a client. Both written and oral expression are explored and evaluated.

So, that is the basic idea. Now, how does that play itself out?

Coverage

In terms of substantive coverage, after offering a course introduction and setting out the basics of valuation (by connecting the concept to corporate finance practice), I split most of the rest of the course into two overarching sections. First and foremost, I cover the instruments that are basic to corporate finance. Here, I am not trying to teach people how to draft a complicated swap arrangement, for example. That's not the point of this course in my institution, in my view. In the course segment on financial instruments, my students cover debt securities, preferred stock, and convertibles, exchangables, and options (the last three as my unit on derivative securities). Once I get done covering the basic forms of those different instruments, I move on to corporate finance transactions. I cover dividends and repurchases, public offerings, and mergers and acquisitions, offering many different examples and connecting them to the instruments that we already have covered.

Then, I have a slot at the back end of the course (about three hours of class time) that doesn't really fit into those two areas. I use these three hours to cover different topics from year to year, but in all cases, these final class hours bring together themes from the two principle segments of the course. For the past two years, I have covered (1) public investments in private enterprise as part of the financial crisis and (2) the analysis of a debt instrument through the lens of pretrial proceedings in a highly publicized case. With respect to the former, we have used a full 75-minute class session to discuss aspects of governmental regulation through dealmaking, covering David Zaring and Steve Davidoff's article on this topic (published in the *Administrative Law Review*) and, in fall 2010, a related article written by me for the *Seton Hall Law Review*.[5] These articles evidence new uses for the corporate finance instruments and transactions we have covered and, in the process, allow for useful review.

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[5] Steven M. Davidoff & David T. Zaring, *Regulation by Deal: The Government's Response to the Financial Crisis*, 61 ADMIN. L. REV. 463 (2009); Joan MacLeod Heminway, *Federal Interventions in Private Enterprise in the United States: Their Genesis in and Effects on Corporate Finance Instruments and Transactions*, 40 SETON HALL L. REV. 1487 (2010).

On the latter issue—a debt instrument in the context of pretrial proceedings—we have reviewed a transcript of my expert testimony in a corporate finance case for HealthSouth Corporation, and I have asked the students to critique certain aspects of my testimony and the lawyering evidenced in the transcript as our last class. The requested critique has been a useful packaging mechanism for some of the recurring themes in the course.

Teaching Philosophy

My philosophy and goals in teaching this material stem from my professional and personal strengths. I practiced in the mergers, acquisitions, and securities regulation areas for fifteen years at the Boston office of Skadden, Arps, Slate, Meagher & Flom LLP. My practice experience there frames both my view on the objectives of the Corporation Finance course in a standard law curriculum and my teaching of the course. I try to link the theory and policy of corporate finance (on one end of a spectrum) through doctrine to practice (on the other end of that spectrum). So, I endeavor to lead the students through that spectrum on almost everything we do over the course of the semester.

Theory admittedly has the smallest role in my course, but the course is designed so that students are getting some theory. For example, in our classes on valuation at the front end of the course, we engage theoretical aspects of valuation in corporate finance. We also cover the efficient capital markets hypothesis and theoretical aspects of behavioral finance during the semester. Students get some of this theory in other law school classes and, for the JD/MBA students in the class, they are instructed in finance theory and methodology in the College of Business Administration. It is fair to say, however, that I teach principally the *practical legal*, rather than the *theoretical*, aspects of corporate finance in this course.

Policy matters in corporate finance underlie the various bodies of rules that apply to corporate finance instruments and transactions. Paramount among them, for purposes of my Corporate Finance course, are the facilitation of capital investment in business enterprises (from business entity laws), investor protection and the maintenance of market integrity (from securities regulation), and freedom of contract (from contract law and contract drafting principles). These policies (and occasionally others, including tax policy) entangle themselves in various ways in the materials covered in the course.

In linking theory and policy to skills, my primary connective device is legal doctrine. The doctrine of corporate finance is a fusion of a number of different areas of law. Those of you who teach Corporate Finance know this well. In fact, many, if not most, of the cases involve more than the law of business associations, securities regulation, contracts, and contract drafting principles. They may involve, for example, bankruptcy, tax, or real property law. So, we get to talk about things like original issue discounts[6] that the students may not see in other classes in a transactional context. This is what I mean when I say that this is not a traditional doctrinal class. It is more of a potpourri of doctrines, linked in a law practice context.

Accordingly, I also urge students to inquire about and internalize norms of corporate finance law and practice—the "lore," as opposed to the law, of corporate finance. This is an important part of the course for many. There are some rules that courts and

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[6] *See* U.S. Internal Revenue Service, Form 1099-OID, Instructions for Recipient (2011), *available at* http://www.irs.gov/pub/irs-pdf/f1099oid.pdf ("Original issue discount (OID) is the excess of an obligation's stated redemption price at maturity over its issue price (acquisition price for a stripped bond or coupon). OID is taxable as interest over the life of the obligation.").

transactional participants use in corporate finance that are part of the legal fabric of corporate finance but are not law itself. These rules are often unwritten and must be derived from a close reading of a case or from a practice-oriented resource. We undertake to discover these norms as we move through the course material.

Finally, as I earlier noted, I teach transactional skills at that far end of the content spectrum (connected by doctrine to the theory and policy elements of the course). Planning and drafting is a J.D. degree requirement at The University of Tennessee College of Law.[7] Each student must take at least one planning and drafting class, and my Corporate Finance course satisfies that degree requirement. (Our more general Contract Drafting course also fulfills this degree requirement, which is one reason why that course is so popular.)

Although I am teaching a practical legal discipline in this course, I use the planning and drafting focus of my Corporate Finance course to re-enforce sound legal reasoning. I will get back to this aspect of the course shortly. I also use the course to teach "speaking the law" as well as "writing the law," and I evaluate students on both bases.

Although I will say more about assessment below, I will note here that transparency in evaluation is one of my teaching objectives for myself each year. I have to engage with it when I construct my syllabus, when I assemble my course materials, when I write-up my class notes, and when I teach. I am not a hide-the-ball-oriented Socratic-method teacher in this class. Instead, I tell the students as clearly as possible what they are supposed to do for each of the graded assignments. I also tell them in the assignment the basis or bases on which they will be evaluated. My grading sheet for each of the assignments in the class uses the articulated bases for evaluation from the assignment as the evaluation metrics, and I assign weights to each of the evaluative criteria (which may change from year to year). So, the students should know what they are being graded on in addition to what they are being asked to do and can proceed accordingly.

Teaching and Evaluation Methods

I use multiple teaching and evaluation methods in this course, and even though I will only be discussing some of them in detail below, I will mention them all here.

I do lecture some of the time in class because I think it is important to set the stage in a different way than the reading or other teaching methods may set that stage. I also engage in some normal question-and-answer teaching--not Socratic, but standard, interactive questions and answers to test the students' understanding of the reading and any other representation of basic course concepts. I also employ the problem method, and I sometimes use a panel of experts. For example, I ask two-student teams to teach one class during the course of the semester, under my guidance, and I also use small-group expert work in the classroom. As I indicate in my course objective, the students work as co-counsel throughout the course, including in marking up a draft redemption notice in a group format. For that exercise, I have two teams in the class compete with each other to see how much they can catch and correct by using a precedent transaction document to draft a debt redemption notice. I also ask the students to engage in peer review in the third graded writing assignment in the course, which consists of each student reviewing and commenting on the substantial written project of another student. I describe that project below. Finally, I

[7] *See* The University of Tennessee College of Law, Planning and Drafting Requirement, *available at* http://www.law.utk.edu/administration/records/planning-drafting.shtml.

also use role playing and guest lectures (typically, on bankruptcy, reorganizations, and restructurings and on municipal finance) in my course.

Course Elements and Teaching Materials

Planning and drafting are the core elements of the course. We do some of the drafting on the Web, some of it in class, and some of it in hard-copy format. For teaching materials, I use a non-traditional law text, Richard McDermott's *Legal Aspect of Corporate Finance* book.[8] The book is a fine jumping-off point for my work in the course. There are cases in the book, but the book also includes, for example, New York Stock Exchange rules (although I teach my students to look on the Web for the current versions) and excerpts of actual corporate transactional documents. I supplement this text with book excerpts, law review articles, and other materials (e.g., the earlier mentioned pretrial proceeding transcript).

In addition, I give the students a one-day training session on electronically focused legal research for corporate finance. There is a tutorial on Web-based research that they are required to listen to and watch before class (featuring slides and audio from two of our law librarians). I then take the students through some exercises and give them Web-based handouts on how to use both LEXIS and Westlaw to find precedent transaction documents using the EDGAR[9]-related databases in each product. These databases are much more granularly searchable than the actual EDGAR filings available through the Securities and Exchange Commission's Web site.[10] I also give my students access to form documents and practice tools from my own collection and steer them to library resources of the same kind.

Student Evaluation and Grading

Class participation is 15% of each student's grade in the course, which includes his or her class expert team-teaching experience and in-class exercises, as well as other constructive Web-based and in-class engagement. With only twenty students, I can easily keep track of these evaluative elements. Each year, I set up and weigh components of that 15% in different ways. The students also complete a disclosure drafting assignment, worth 20% of their grade. The assignment requires that the students draft Form S-1 prospectus disclosure for some aspect of a series of preferred stock. Although the exact feature of preferred stock that the students must describe in their disclosure varies from time to time, past assignments have required a description of anti-dilution provisions within conversion provisions or of redemption provisions.

The students also complete a substantial written project. This is the central assessment feature of the course, and I describe it in more detail below. Specifically, that assignment includes a draft provision for a corporate finance instrument--a voting provision for preferred stock, or a debt redemption provision, or something similar. The provision is typically (and optimally) only about a page in length. The drafting accompanies a memorandum that explains the student's drafting choices. That memorandum is the core of the assignment. This assignment—the drafting and the memorandum taken together---is worth 45% percent of each student's grade.

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[8] RICHARD M. MCDERMOTT, LEGAL ASPECTS OF CORPORATE FINANCE (4th ed. 2006).

[9] EDGAR is the Electronic Data Gathering, Analysis, and Retrieval system through which filings of disclosure documents are made, stored, and published with the U.S. Securities and Exchange Commission. *See* U. S. Securities and Exchange Commission, Important Information About EDGAR, *available at* http://www.sec.gov/edgar/aboutedgar.htm.

[10] The Securities and Exchange Commission's Web site can be found at http://www.sec.gov/

Finally, each student drafts a review memorandum, which evaluates another student's substantial written project on three distinct bases. The grade on this assignment constitutes the last 20% of the course grade.

Using IRAC as a Drafting Tool

Having described the basic attributes of my Corporate Finance course, I now will illustrate the overarching framework that I use for planning and drafting in this course by describing the substantial written project assignment for the course in more detail. The key aspect of that framework is that I use IRAC as a specialized, advanced, contract-drafting tool. IRAC is only one tool we use, but it's what I focus on most. It enables me to use cases in a new way: to support the drafting of instruments and contracts used in corporate finance transactions. I ask students to find the drafting issues in many of the cases in the casebook. Sometimes, the drafting issue is the same as the issue that leads to a holding in a normal IRAC-type analysis. Sometimes, it is not. Sometimes, the drafting issue is significantly narrower or it is only a small piece of the case (rather than the central legal issue in contention).

Then, once the students have found the drafting issue in the case, I ask them to identify X and Y the following statement: "If the plaintiff wanted X" (the drafting issue, viewed from the plaintiff's desired vantage point), "the plaintiff should have Y" (drafted what it needed into the instrument or agreement at issue to achieve its objective —that drafting being the conclusion in the IRAC analysis, reached after applying the relevant rules to the germane client and transactional facts). So what "rules" do I tell them to apply to the facts once we've identified the issue?

Admittedly, drafters must consider a huge assortment of rules applicable in corporate finance matters to address drafting questions. A drafter must look for legal rules, if there are statutes, regulatory provisions, or cases that expressly cover the issue. If the drafter finds legal rules, he or she begins by using those. Drafters need to know the applicable law in order to do that, and it may be business associations law, securities law, tax law, contract law, etc. There may also be stock exchange or other securities market rules that apply. So, I ask the students to look for those, too. A drafter may even need the dictionary—a specialized dictionary or a general one. A drafter may need to rely on drafting principles, or he or she may need to understand transactional norms. For example, a drafter generally should look at what other agreements do to resolve the issue—what is customary in practice—so he or she is not drafting provisions from way out in the relative hinterlands, so that everyone is going to look at the draft and saying, "What is this? I have no idea what that is." Then, there are theories and policies (e.g., for the larger contract questions) that the drafter should be attentive to as a means of resolving drafting issues where the rules may be unclear or incomplete. The students have to look for rules from all of these sources.

The analysis part of our drafting IRAC takes the rules that we identify and applies them to facts relating to the client and the transaction. We do our application work in class using facts from the cases and in the written projects through simulated clients and transactions. The students construct their own client and transactional facts in connection with their projects. We spend a fair bit of time discussing, in connection with individual student projects, the ways in which facts and rules interact—how a change in facts may dictate a different drafting result under the same rules, and how different rules may lead to different drafting results given the same facts.

The result of the analysis—the application of relevant rules to client and transactional facts—is the drafting choice that the drafter makes in response to the issue. So, you can see, it is not exactly your mother's IRAC; it is a little different, but the use of IRAC in this context re-enforces the same set of cognitive processes that a lawyer goes through to answer other types of legal questions in other contexts (e.g., advocacy-oriented or overall transaction-structuring matters). Many, if not most, contract drafting issues in corporate finance are, at their foundation, legal questions, and since I aim to teach the legal aspects of corporate finance, I focus on the drafting questions in corporate finance through the transparent use of IRAC.

Specifics on the Substantial Written Project

It seems relevant to offer some additional details at this juncture about the students' substantial written projects. Each student's substantial written project is due near the end of the semester, usually within the last two weeks of the semester. I use the projects principally as a summative form of assessment due to their placement at the end of the semester. But my work with the students over the course of the semester and my post-course comments are formative and are meant to propel the students into either another course (if they are second-year students or if they have a semester left as third-year students, depending on the semester in which I am teaching the course) or their professional lives. Principally, however, I use this as a primary grading device to test whether the students have learned what I am teaching them in the course.

The students are required to pick their own projects, and they can pick whatever they want within the scope of the course, as long as the drafting is about a page long. Each student must file a written proposal with me early in the semester in response to a request for proposals. My comments on each student's proposal become a helpful formative assessment tool, too, because I sit down with each student to discuss his or her understanding of the project within the first three or four weeks of the semester. If a student chooses a topic that we are not going to get to until later in the semester, we start engaging with the topic early, and I tell him or her what to look out for along the way as the semester progresses. Regardless, this meeting allows me to assess each student's relative understanding of the foundational material for the course in the first few weeks.

Leveraged Learning

The substantial written project is also a component of leveraged learning. The students not only learn from constructing their own substantial written project, but they also have the opportunity to leverage what they learn through that experience into additional learning by reviewing another student's substantial written project (and engaging in peer teaching in the process). In the course of these last two assignments, each student transitions from the role of a junior associate drafting a key transactional provision to the role of a mid-level associate reviewing a junior associate's work. Each student takes what he or she learns in doing his or her analysis and drafting in the substantial written project and reflects on it to improve another person's analysis and drafting. I assign each student a type of instrument to review that is different from the one he or she has drafted. So, if a student is drafting a debt redemption provision for her substantial written project, she might review an anti-dilution provision or voting provision in the terms of preferred stock for her review memorandum. The student therefore has the opportunity to employ the same type of analysis but use it in a new area of corporate finance planning and drafting.

The idea, in sum, is that each student can leverage the learning from the substantial written project to complete the review project. The review memorandum is, in some sense, a simple way to re-enforce the IRAC reasoning approach one more time while, at the same time, using that approach and the additional learning that the students have done in their drafting projects to help another. In assessing a student's performance on the review memorandum, part of my assessment tool requires me to evaluate how well the student uses the IRAC analysis that the project calls for. I will conclude by describing briefly a simple example to illustrate how these two graded projects work together.

Example

Suppose a student wants to address in his or her project whether and, if so, how a senior indenture conversion provision for privately placed debt being issued by the student's client should provide for an anti-dilution adjustment for a spin-off transaction. The first thing I always ask the students to do is look for predicate transactional authority: authority for the parties to engage in the specific transaction as part of a larger deal for which there also must be authority. So, there must be authority at both the constituent and transactional levels. The students therefore must determine and show whether the proposed parties to the investment—the issuer and the indenture trustee, assuming there will be an indenture—have the authority under applicable law and regulation (and, in the case of entities, organizational documents) to enter into an indenture governing convertible debt with the proposed anti-dilution adjustments and whether the governing law for the debt indenture supports the validity and enforceability of convertible debt with the proposed anti-dilution adjustments.

Assuming the relevant authority questions can be satisfactorily answered, what rules might a student choose to apply in constructing the appropriate anti-dilution adjustment? A threshold question the student must answer is: what is a spin-off? In researching the question, a student is likely to find that it is a type of transaction that is not always codified in statutory law.[11] Moreover, in the absence of a statutory or regulatory reference, courts are a bit squirrelly about defining what a spin-off is. They tend to define spin-offs in different ways. Some courts may use a treatise definition;[12] others may resort to a definition from a general or specialty dictionary.[13] After identifying possible definitional rules to determine what a spin-off is, the student might determine, for example, that it is a specialized form of dividend. So, the student initially may reason that a provision that uses the word "dividend" is enough. But before determining that conclusion is correct, the student will also have to consider the effect of other possible rules, including contract construction and interpretation rules reflected in applicable decisional law, like *expressio unius est exclusio alterius*. The student may then reason that a spin-off may not be read onto the contract if the contract does not include a clear, express definition of a dividend that comprises spin-off transactions or if the provision does not expressly mention and define a spin-off transaction separate and apart from a dividend.[14] Contract interpretation rules factor significantly in a number of the cases.

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[11] Sometimes, however, a relevant definition can be found in a statute or other form of legal rule. *See* Tasty Baking Co. v. Cost of Living Council, 395 F. Supp. 1367, 1373 n.22 (E.D. Pa. 1975) (citing to a definition in the Code of Federal Regulations).

[12] *See* Gada v. United States, 460 F. Supp. 859, 863 (D. Conn. 1978).

[13] *See* CenterPoint Energy Houston Elec., LLC v. Gulf Coast Coal. of Cities, 252 S.W.3d 1, 18 (Tex. App. 2008).

[14] *See*, *e.g.*, Lohnes v. Level 3 Communs. Inc., 272 F.3d 49, 61 (1st Cir. 2001).

What about drafting norms? What do typical anti-dilution provisions that include adjustments for spin-off transactions look like? Do they describe a spin off separately from a dividend, do they define what a spin-off is if the word is mentioned? The students also can look at academic and practice commentary as well as precedent transaction documents from negotiated transactions for answers. I encourage this discovery process. Of course, decisional law is very relevant as an adjunct to these resources because there are a number of cases in the area that construe and otherwise interact with practice commentary and drafting precedent.[15] I expect the students to mine those cases and locate cases in the jurisdiction governing the debt instrument or agreement (likely, an indenture or investor agreement).

As for the application of these rules to facts, the student needs to know who the issuer and indenture trustee are and where they are organized in order to assess the authority of each of them to engage in the transaction. The student also needs to know the applicable law for the debt instrument or agreement and how the courts might treat spin-off transactions in all incarnations under that law. The student must understand what the client's objectives are and know why the client is worried about spin-off transactions and the kind of spin-offs about which the client is concerned. This requires good diligence on the part of the drafter, as well as some visioning. I explain to the student that she will get better at elucidating client facts as she gains in experience. I assist her in identifying areas for inquiry to guide her to relevant client facts. I urge her to look at the range of transactions represented in practice commentaries and applicable decisional law to identify transactions that may be of concern to her client. In the process, I am offering my experience as a "human resource," to add to the hard-copy and electronic resources available to her for use on the project.

The student's conclusion may be that the client should include an express, unambiguous reference to a spin-off transaction in its anti-dilution provision, defined (or undefined, depending on the client's facts), rather than relying on a dividend adjustment provision to best accomplish the appropriate anti-dilution result. Therefore, the student will draft an antidilution agreement that expressly references spin-off transactions.

This is a very brief description of how the IRAC technique might work in resolving corporate finance drafting issues. The actual discussions are significantly more detailed and involve substantial give-and-take between the student and me. And each student's project involves the resolution of numerous drafting issues.

I hope that this summary gives you an idea of the way I teach my Corporate Finance course as an advanced contract drafting class using a version of the IRAC analytical method. I find that this innovative technique results in both rich conversations with and among the students and well-constructed contract provisions.

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[15] *See*, *e.g.*, Vogel v. Brown, Fed. Sec. L. Rep. (CCH) P94,831 (S.D.N.Y. 1974); Wood v. Coastal States Gas Corp., 401 A.2d 932 (Del. 1979).

MICHAEL A. WORONOFF

TEACHING NUMERACY

The most successful transactional lawyers are numerically literate. By this, I mean that, to reach excellence, a transactional lawyer will be

- able to reason with numbers and other mathematical concepts, and
- very comfortable with logic and reasoning.

Numeracy includes an understanding of subjects such as basic numbers, orders of magnitude, algebra, and probability and statistics; areas that typically get short shrift in the law school curriculum.

So, today I want to talk a little bit about teaching numeracy. I thought we might examine why numeracy is important and how we can go about teaching it effectively.

Let me start by identifying some issues. First, many people who go to law school do not want to learn material that requires understanding complex mathematical concepts.[16] I'm not saying everyone, but I do think a large portion of law students have no desire to take courses that require proficiency with numerical ideas. Often these students majored in undergraduate subjects in which they never had to use sophisticated mathematical concepts.

Second, skill levels across a particular law school class will differ dramatically. In law school you have Engineering majors sitting in class next to English majors. So, the professor must decide – do I teach to the bottom skill level of the class, and bore the mathematically literate, or to the top of the class, above the heads of most others?

Finally, many law professors (no one in this room I'm sure) do not enjoy or are uncomfortable teaching these concepts, or think their students are incapable of learning them. For example, in my venture capital course I spend a lot of class time discussing the mechanics of convertible securities and the details of anti-dilution provisions – mathematically intense concepts. The last time I was at this conference, I was talking to someone who also teaches a venture capital course and I asked how he got across these ideas to his students. He said, "Oh, my students aren't smart enough to get math that is that difficult." Now when they go out to practice, they will have to understand these concepts; but he doesn't think they are smart enough to learn them in the classroom. If they can't learn in the classroom, how are they going to learn on the job?

Numeracy and Transactional Law

So my bias is clear—I think teaching numeracy to transactional law students is crucially important. But maybe I'm wrong. Maybe the way we currently teach is fine, and

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[16] *See, e.g.,* Scheherazade Fowler*, Journal of a Young Lawyer,* LAW PRACTICE TODAY (Mar. 2005). ("There is some subset of lawyers who . . . chose the law . . . partly because of a fear of math. These are the lawyers who try really hard not to look too closely at numbers, who accept the accountant's numbers blindly, whose eyes glaze over at spreadsheets and balance sheets. This [is] an extraordinary, glaring weakness."); Martha Ann Sisson and Amy Leafe McCormack, *Success in 21st Century Private Practice: Retooling for an Enterprise Culture*, UVA LAWYER (Fall 2009) ("Over the years, we have heard many lawyers muse that they would have attended business school if they were not math-phobic. Achieving success, however, requires overcoming old fears and perceived deficiencies.")

numeracy is not that important in practice. Maybe the fact that many lawyers are math-phobic proves it doesn't matter.

Look at the following list of tasks commonly performed by transactional lawyers, each of which requires some level of numeracy (the list is quite obviously incomplete):

- Pre and Post Money Valuation
- Anti-Dilution Provisions
- 83(b) Elections
- Earn-outs
- Purchase Price Adjustments
- Distribution Waterfalls
- Due Diligence and Disclosure
- Underwriting Discounts & Green Shoe
- Subordination Provisions
- Options
- HSR
- Interest & Dividends
- Exchange Ratios
- Financial Covenants

As you can see, whether it's venture capital, finance, capital markets, mergers and acquisitions, fund formation, tax or real estate, good transactional lawyers must be numerate; yet we're simply not teaching students effectively.

How to Teach Numeracy

How do we teach numeracy effectively given the issues previously identified? Law professors can take three steps to increase the likelihood of success in teaching numeracy.

First, set appropriate expectations. In the hand-out materials,[17] there is a screen shot of my Venture Capital course description, which also appears in the material purchased by the students. As you can see, the description states that "Math competence through algebra is assumed and important." I'm telling the students clearly, up front, that we use math. If they don't want to take the course, that's okay, but if they do, they know we are going to use algebra, and they need to have competency in it.

Second, introduce concepts incrementally. In a few moments I will describe how I teach valuation and anti-dilution concepts over the course of a semester. To give you a flavor of how the course progresses, we start off with the simplest possible example, and then throughout the semester increase complexity by building on previously learned concepts.

Finally, don't underestimate your students. My experience has been that the more you challenge the students, the more they live up to the challenge, and I have been able to teach very sophisticated mathematical concepts to people who have only high school level math competence.

The Magic Table

I want to try to demonstrate this incremental approach using examples from my Venture Capital class. When I first started teaching venture capital about ten years ago, I

[17] *See* Michael Woronoff, *Teaching Numeracy* (Conference Handouts), http://www.law.emory.edu/fileadmin/Translaw/ConferenceMaterials/2010_Conference_Speaker_Materials/Wornoff/Woronoff_Conference_Handouts.DOC.

would try to teach valuation and anti-dilution through student memorization of basic formulae. There are five key formulae relating to valuation:

Formulae

1. Pre-money Value = S_0 x P
2. Post-money Value = S_1 x P
3. Pre-money Value + $ = Post-money Value
4. $S_0 + S_{Issued} = S_1$
5. $ = S_{Issued} x P

S_0 = # of fully diluted shares outstanding pre-financing

S_1 = # of fully diluted shares outstanding post-financing

S_{Issued} = # of shares issued in the round

P = Price per share paid in the round

$ = Dollars raised in the round

For whatever reason, it was very difficult to get students to remember and understand these. In about my third year or so of teaching, I thought, there's got to be a better way to do this, and I came up with what I call the Magic Table. In its most basic form, the table looks like this (the bracketed information in the cells reflects descriptions of numerical amounts that will be filled in):

	Shares	Value (at [P])	%
Pre-money	[S_0]	[Pre-money value]	
Amt Raised	[S_{Issued}]	[$]	
Post-money	[S_1]	[Post-money value]	100%

The Magic Table, which students generally have no trouble remembering, incorporates the formulae. It allows students to learn the formulae, seemingly without having to memorize them.

For example, the product of P (the price per share paid in the round) and the amount in the first column of any row, equals the amount in the second column of that row. As a result, the first row incorporates Formula 1, the second row incorporates Formula 5, and the third row incorporates Formula 2.

Furthermore, the sum of the amounts in the first and second row of any column equals the amount in the third row of that column. As a result, the first column incorporates Formula 3, and the second column incorporates Formula 4.

For example, under Formula 3, the post-money value is equal to the pre-money value plus the amount raised. So the sum of the amount in row 1, column 2 and the amount in row 2, column 2 equals the amount in row 3 column 2.

If a student can remember how to draw the table he or she will know the formulae without having to remember the formulae.

Application

As I have discussed before, I primarily use Harvard Business School cases to teach my class.[18] The first case (which I teach on the first day) describes a recent Berkeley MBA's attempt to start a business, including early efforts at finding an attorney and an accountant, and obtaining angel financing.[19] The case provides a good, simple introduction to valuation problems using just three pieces of information. During the course of the case study we are told, first, that the company is raising one million dollars. Second, that the purchase price is fifty cents a share. And third, that before the offering four million shares are outstanding.

Information Given:

- $ = $1m
- P = $0.50/share
- S_o = 4m

We can use this information to begin filling in the Magic Table:

	Shares	Value (at $.50/share)	%
Pre-money	4m		
Amt Raised		$1m	
Post-money			100%

The rest of the table may be filled in with simple calculations. For example, we know that, for any row, the amount in column 2 equals the per share price being paid (P) times the amount in column 1. As a result, we know that the amount in row 1, column 2 is $2 million (50¢ x 4 million = $2 million) and the amount in row 2, column 2 is 2 million (50¢ x 2 million = $1 million). We also know that, for any column, the sum of the amounts in rows 1 and 2 equals the amount in row 3. So the post-money number of shares is 6 million (4 million + 2 million) and the post-money value is $3 million ($2 million + $1 million). Finally, we fill in the percentages.[20] The filled in table looks like this:

	Shares	Value (at $.50/share)	%
Pre-money	4m	$2m	67%
Amt Raised	2m	$1m	33%

[18] Michael Woronoff, *Using a Venture Capital Class to Teach Transactional Skills* (2008) *available at* http://ssrn.com/abstract-1292477, *adapted from* Rachel Arnow-Richman, Lisa Bliss, Sylvia B. Caley, & Michael A. Woronoff, *Teaching Transactional Skills in Upper-Level Doctrinal Courses: Three Exemplars*, 10 TRANSACTIONS: TENN. J. BUS. L. 367 (2009).

[19] William A. Sahlman, Michael J. Roberts, & Christina Darwall, *DigitalThink: Startup,* Harvard Business School Case 898-186.

[20] The percentage in any row is determined by dividing the amount in any column of that row by the amount in the same column of the post-money row and multiplying the result by 100. For example, in this hypothetical, (4m ÷ 6m) x 100 = 67%.

	Shares	Value (at $.50/share)	%
Post-money	6m	$3m	100%

That's the first class. All the formulae are here. But students do not have to struggle to remember them anymore. And as a bonus, the table helps them understand the relationships between these variables. I can't tell you how dramatic this change in method was.

To be fair, when we're done with the first lesson, half the class is still a bit confused, but that is okay because we are going to repeat the exercise several times over the semester.[21] Half the class starts getting it right away and the other half just has to trust me that, by the end, they will get it. And they do.

Step Two

The text that I use, Bagley and Dauchy,[22] contains a sample term sheet for a venture capital deal. The term sheet contains the following information:

Information Given:

- S1 = 1,666,667
- S_{Issued} = 666,667
- Represents 40% of fully diluted shares post-closing
- P = $1.20/share
- $ = $0.8m
- Option pool = 20% of post-closing fully diluted shares

Filling in the Magic Table with this information results in:

	Shares	Value (at $1.20/share)	%
Pre-money			
Amt Raised	666,667	$0.8m	40%
Post-money	1,666,667		100%

It is a simple matter to fill in the rest of the table using the same concepts as before (for example, top row plus middle row equals bottom row).

	Shares	Value (at $1.20/share)	%
Pre-money	1,000,000	$1.2m	60%
Amt Raised	666,667	$0.8m	40%
Post-Money	1,666,667	$2.0m	100%

[21] I reinforce the lessons learned by using basic valuation exercises as a small part of several more cases before I go on to the next level.

[22] CONSTANCE E. BAGLEY & CRAIG E. DAUCHY, ENTREPRENEUR'S GUIDE TO BUSINESS LAW (3rd ed. 2008).

So far, this is just one more repetition of the initial concept. However by now most of the class understands the basic concept sufficiently to allow us to begin to incrementally add complexity.

For example, in real life, the pre-money shares will not be held by a single class of security holders. Most of the time a portion of those shares will be held by the founders and a portion will be reserved for issuance under an option pool. So we expand the Magic Table and add that additional information. In our example, the reserved option pool is 20% of the number of post-closing, fully diluted shares.

	Shares	Value @ $1.20/share	%
Founder			
Option Pool			20%
Pre-Money	1,000,000	$1.2m	60%
Amt Raised	666,667	$.08m	40%
Post Money	1,666,667	$2.0m	100%

We can use this information to fill in the rest of the table. For example, we can calculate that the Founder shares represent 40% of the total number of shares (40% + 20% = 60%). We can then use these percentages to fill in all of the other information.

	Shares	Value @ $1.20/share	%
Founder	666,667	$0.8m	40%
Option Pool	333,333	$.04m	20%
Pre-Money	1,000,000	$1.2m	60%
Amt Raised	666,667	$.08m	40%
Post Money	1,666,667	$2.0m	100%

To recap, we started with a simple example in the first class. We essentially repeated it in several classes, and when the students are sufficiently comfortable we added incremental complexity.

Advanced Steps

Once we have valuations down, we move on to down round financings and anti-dilution calculations. To begin, I give students the following data:

<u>Information Given:</u>

- S_{Issued} = 2m
- Represents 20% of fully diluted shares
- $ = $2 million
- Initial conversion price = $1

By now, even students who initially had difficulty filling in the Magic Table can fill it out easily.[23]

1st (Series A) Round

	Conversion Price	Shares	Value @ $1/share	%
Pre-Money	N/A	8m	$8m	80%
Amt Raised (Series A Investor)	$1	2m	$2m	20%
Post-Money	N/A	10m	$10m	100%

After we create this table, I add some more information: Assume the company now does a subsequent (Series B) down round financing, raising $3 million by issuing shares representing 50% of the company on a fully diluted basis. We then create three more tables to demonstrate:

(1) what happens if the Series A investor has no anti-dilution protection;

(2) what happens if the Series A investor has full ratchet anti-dilution protection, and

(3) what happens if the Series A investor has weighted-average anti-dilution protection.

These three tables demonstrate the practical effects of the different types of anti-dilution protection.

Given our time constraints today, I'll quickly go through only the full-ratchet table here. In addition to the new information, notice that we can carry over some (but not all) of the information from the previous table. I make the students think about how you figure out what information can be carried over. For example, the Founder and option holders won't have anti-dilution protection,[24] so their 8 million shares will not change. Furthermore, full-ratchet anti-dilution provisions operate to maintain the initial economic value of the securities held by the Series A investor, so the value of the Series A investor's shares ($2 million) will not change.

2nd (Series B) Round

	Conversion Price	Shares	Value @ $_/share	%
Founder/Option Holders		8m		

[23] Notice that we've added a column for conversion price. This column is necessary when performing anti-dilution adjustments. Because most VC deals are convertible on a 1:1 basis, the initial conversion price typically equals the per share purchase price (P).

[24] Of course, if everyone has anti-dilution protection, no one does. The essence of anti-dilution protection is to transfer value from one group of security holders to another.

	Conversion Price	Shares	Value @ $_/share	%
Series A ($2m investment)			$2m	
Pre-money				
Amt. Raised (Series B)			$3m	50%
Post-Money				100%

Once we add those two pieces of information, it is just a Magic Table. It is then a simple matter to fill in the table. For example, the pre-money percentage is 50% (50% + 50% = 100%), the post-money value is $6m; the pre-money value is $3m ($3m + $3m = $6m); the Founder/Option Holders value is $1m ($1m + $2m = $3m); and so on.

2nd (Series B) Round

	Conversion Price	Shares	Value @ $.125/share	%
Founder/Option Holders		8m	$1m	40%
Series A ($2m investment)	$.125	16m	$2 m	10%
Pre-money		24m	$3m	50%
Amt. Raised (Series B)	.125	24m	$3m	50%
Post-Money		48m	$6m	100%

Of course, it is impossible to go through an entire semester in twenty minutes, so I necessarily skipped quite a bit. Nevertheless, I hope this demonstrates the incrementalist approach necessary to teach subjects that require an understanding of complex numerical concepts to a group of informed, willing students (even when these students may have very different levels of experience).

LYMAN P. Q. JOHNSON

TECHNIQUES TO TEACH SUBSTANCE AND SKILL IN CONTRACT DRAFTING: IN-OFFICE MEETINGS AND ANALYTICAL MEMOS

I'm going to sit because I don't have a PowerPoint presentation and I don't want my notes to spill all over the podium. I'm going to talk about two techniques to link in-depth learning and drafting. But before I turn to the two techniques, I want to very briefly situate my comments into some larger currents in legal education. As we all know, there's a great deal of healthy ferment in legal education these days, and there are many reasons for that. Certainly the Carnegie Foundation Report of 2007,[25] the recent upheaval in the market for young lawyers, and changes in the delivery of legal services are factors. But these changes were brewing for some time, even though they may not have openly surfaced. And one long-standing concern for those of us interested in formal legal education has been the overall singularity of the model of legal education in the United States. Now, with some useful turbulence in legal education, a greater pluralism of approaches is emerging. Some approaches are wholesale, as with our revision of the entire 3L curriculum at W&L; others are more incremental; course by course, program by program, professor by professor.

One common, though not universal, theme has been a dramatic upsurge in pedagogy with a more practical, experiential, and lawyerly bent. At W&L, we call these practicums and there are many features of these. When fully-phased in, under our program students will take no traditional courses during their third year. They will take only practicums, and externships, and have clinical experiences. Joan's remarks captured a lot of the features of this overall approach, and I just want to highlight three very briefly.

Practical Pedagogy

First is greater student responsibility for organizing and producing the work. We could use a baseball metaphor. The teacher is no longer a pitcher, handling the ball on every play, but has been moved out to being sort of a lonesome right fielder, observing or participating occasionally, but really not the center of the act. Second, law is not learned as a stand-alone endeavor; it's learned by actually solving problems. Third, rather than simply acquire knowledge and information, however important that might be over their entire careers, students have to exercise informed judgment. They must offer views and advice, so rather than simply take in, they have to produce.

I think the transactional lawyering movement is really part of this larger current in education. Having taught this practicum for over twenty years and having been through major curricular reform (and that's not always a pleasant process to be involved in, as we all know), this reform I've been involved in has sought a more practice-oriented thrust. I want to highlight one other point that I think Mike's and Joan's remarks, as well Ron's and George's comments this morning, really drove home. I think it's imperative for those interested in transactional pedagogy, and practical pedagogy more generally, to pervasively emphasize the intellectually demanding nature of this work. And among true believers here, this is not news. But I have repeatedly seen in legal education the number of skeptics who

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[25] WILLIAM M. SULLIVAN ET AL., EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW (San Francisco: Jossey-Bass 2007).

vaguely suspect that this is not intellectually legitimate, who really wonder whether practical education is intellectually demanding enough.

Of course it is. But I think we need to be aware that there are people who do not necessarily share our views. So I just want to touch on three places where this needs to be communicated. One, it needs to be communicated in your home schools. And my home school has been very receptive to this, but there remain skeptics. Second, I think it needs to be communicated among our peers in legal education generally. And I think as you move up the elitist scale, some of the skepticism may be more deeply entrenched. I was very disappointed, for example, to read Brian Leiter's description of our 3L reforms.[26] I don't think he understood them at all. And, after some more conversations, I think he became more receptive, but I don't think he really understood or was especially open to them at all. But third, I think we have to communicate it to our own transactional lawyering students. And I want to talk about that today. I think a transactional lawyering class can be very intellectually challenging.

Washington and Lee's Practicums

With that backdrop let me hone in a little bit. First, let me explain a little bit about my class and a little bit about Washington and Lee. I'm not sure how easily this translates to other law schools. Washington and Lee is a very small law school. It has about 130 students in each class. It is also located in a very small community, Lexington, Virginia, with 7,000 people. That means there's not a lot to distract our law students because they have very little to do: their social life as well as their educational life is in the law school. So it's a very classic captive audience.

Second, my business planning course traditionally ran around twenty to twenty-five students. We have now capped it at fifteen as we go into this pervasive change. It's a five credit class, so it's heavily credited. Relatively few sessions are conducted in the classroom, maybe about a third. Most interactions with students involve meeting with me or working in groups. I use Frank Gevurtz's book[27] but I think I use it the way Joan uses McDermont's book. I like the problems even though I end up changing the problems quite a bit, and there's good background material. Third, my students do drafting, a fair bit of it. I think a well-drawn dispositive document certainly requires skill in drafting, and there are commonalities to drafting skills. At the same time, I think students have to understand, and be able to explain, why certain substantive choices are being made in the document. In short, I think the best drafting requires understanding as well as skill. I will highlight two techniques for drawing this out.

Two Techniques

First, I require a companion analytical memo accompanying the drafting product. This memo explains what was done in the document and why. To draft the document itself takes care of the "how," such as how you are going to put this deal together, including, to cite just one of many possible examples, how you are going to draft your anti-dilution provision, how, in other words, you are going to draft what Joan's talking about. The analytical memo requires the students to explain *why* they did what they did by explaining

[26] Brian Leiter, *Washington & Lee's Radical Transformation of the 3rd Year of Law School*, Mar. 24, 2008, http://leiterlawschool.typepad.com/leiter/2008/03/washington-lees.html.

[27] FRANKLIN A. GEVURTZ, BUSINESS PLANNING (4th ed. 2008).

particular decisions. Second, I require in-office meetings, which are just what they sound like. These meetings' purpose is to guide students as well as deepen their understanding of the material. So let me start with the meetings.

In-Office Meetings

I do several face to face in-office meetings in groups of two or three. In the jargon of learning theory, these are synchronous interactions, not asynchronous interactions. That's just a fancy way of saying we're all participating at the same time. Other examples of synchronous interaction are instant messaging and videoconferencing. These communications are taking place in real-time, and everybody is a participant—as opposed to asynchronous e-mail. In that form of communication, there can be a delay. Some of my colleagues prefer the latter. They prefer asynchronous interactions: they think they get more thoughtful, more reflective, better interactions. I think both work. It just depends on what your goals are.

An example is in the material.[28] I will refer to it briefly. I give students an assignment early on, and you will see that the first paragraph tells them that they must schedule meetings with me. These are mandatory meetings. Now, when they first receive this assignment, it is sort of reminiscent of when Winston Churchill in World War II was trying to figure out how to deal with German U-boats and how to bring them to the surface. Finally, he turned to an aide, and said to "boil the ocean." The aide then asked how, and Churchill said, "I come up with the concepts; you take care of the details." The students receive this assignment and they think, "Wow, I am supposed to put together an LLC or a partnership and tell you why I did what I did?" Well there are a lot of 'ums', and we work through this together, but the first requirement is you must meet with me.

Now, I start these initial meetings with a series of very open-ended questions, and you can pick your own. For example, "What have you done so far?" Now, this requires students to succinctly summarize and describe to somebody in a supervisory position what they have done. Second, "What problems have you encountered?" Here they have to self-reflect and assess and think, "Gee, what has been difficult over the last couple of days?" Third, I ask "What are you planning to do next?" Now, they see that they have to think ahead and plan. And fourth, "How is your group dividing and coordinating work?" "Are you working efficiently?" "Do you have a control freak?" "Do you have a free rider?" "Explain to me exactly how your work on the project is happening."

Now all of these broad questions naturally invite a lot of follow-up questions. If any student doesn't address a particular issue, I can hone in and pose very pointed questions. For example, the first problem was a startup venture with expected losses. So I ask them, "What are you doing about taking advantage, tax-wise, of these losses?" Sometimes they haven't even thought about that. This prompts them to consider whether they should suggest trying to take advantage of these losses now or simply leave them in entity solution where they may be wasted if the business fails. The key here is that students and teachers see learning not in an episodic manner but as an on-going dialogue that occasionally requires the more experienced lawyer to redirect them a little bit, very much like tutorials or like any healthy mentor/protégé(e) relationship.

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[28] *See* Lyman Johnson, *In-Office Meetings and Analytical Memos to Teach Substance and Skill in Drafting* (Conference Handouts), http://www.law.emory.edu/fileadmin/Translaw/ConferenceMaterials/2010_Conference_Speaker_Materials/Johnson/Johnson_Conference_Handouts.docx

Benefits of this Pedagogy

Now what are the benefits? I think there are many. But let me list a few.

1. Studies show greater psychological arousal and motivation from synchronous interaction. When people are dealing in real-time, they are more engaged. The morale is more motivated.
2. Second, it overcomes the tendency in a student's legal education to see learning as something that happens in isolation and by one's self.
3. Third, it's a great opportunity for give and take. Follow-up is immediate. You can correct, expand, and deepen the understanding very quickly.
4. Fourth, you can identify omissions and oversights, the things they simply never thought about, which provides an opportunity for immediate, non-graded feedback. This is very helpful to students. This is sort of the rage these days in assessment, giving them immediate feedback. I don't think all feedback has to be graded. Not only do students not learn in the same way, they also don't not-learn in the same way. They fail in different ways, and the sooner you can correct that, before they actually produce a product, the better.
5. You can observe student responses immediately and see who's prepared and how are they interacting with each other. Are all of them contributing? You can obviously hone in on a particular student to see if he or she is handling his or her share of the work.
6. Also, you can communicate your own professional commitment and you can model mentoring. This is a generalization, but since I became a lawyer thirty-two years ago, I think there has been a dramatic decline in practicing lawyers believing that they have a mentoring responsibility to young lawyers. My firm's older lawyers thought it was part of their professional responsibility to teach me to be a good lawyer. Regrettably, I have heard in recent years many disparaging comments among experienced lawyers about that role. They think new lawyers need to be practice ready. Well, no young lawyer is practice ready. We professors can help, but the teaching mission goes on in the law firm. Students need to see that we're committed to this and also see what it looks like.
7. Next, this so-called "E-generation," has relatively little experience with face to face interaction. Except for their parents and teachers, they probably have had no business experience in a meeting. My twenty-four year old son is a business consultant in Boston, and when he came out of a great school, he was stunned to find the number of meetings he was thrust into with clients and with his senior partners during his first week on the job. And I think the E-generation is really taken aback: they don't really know how to handle themselves in a face-to-face professional situation.
8. And, finally, there are great opportunities to go off the record. You can fill in student deficits in social legal capital, whether it is talking to them about the job search or things they just don't know. It is a wonderful opportunity to transition to other subjects.

In follow-up meetings, I expect greater sophistication because they are further along. For example, I have an IP issue in the first problem, and I expect them to have very

detailed recommendations for how that is going to be taken care of. In general, these meetings permit continued deepening of the student-teacher interaction, and an opportunity for close monitoring of student work and approaches to that work.

Second Assignment Changes To Meetings

Now, on the second page of the second assignment, you will notice a change: at the very end of that paragraph, I do not require meetings. I tell them to schedule meetings with me if they want to. I strongly urge them to meet with me and I emphasize that I am completely available to meet, as they might desire. What I am trying to teach them is that knowing how and when to seek help is something they need to learn. Now having said that, I think this current cohort of law students believes that there is something wrong with asking for help. Somewhere in their earlier educational experiences, they were evaluated for asking questions. I don't know how we remedy that, but that's why I have mixed feelings about making this optional. So I try to couple it with strong exhortation. The better students, in my experience, spend more time in my office because they see how much they can learn.

Companion Memorandum

Let me turn to the other technique: the companion memo. To tie this to my over-arching point, these are writings that are heavily analytical and demanding, and I think they are far richer in their analysis because of the in-office meetings. Students are guided in what issues they have to address, and they are pushed to deepen their understanding. If I simply say, go off, draft the document and tell me what you did, I don't think I would get the quality of analysis or the quality of drafting that I get because they have had some meetings with me.

Let me just go back to the first page as an example. You will see here that the first document I describe is that they have to write a clear, cogent memo, no more than 6 single-spaced pages in length, analyzing whether the startup biotech venture should be organized as a partnership or an LLC. I take the corporate form of business off the table at this stage. I'm going to come back to that in my second problem. Students must tell me which vehicle to use and then tell me why they came to that choice.

And then in the rest of the memo, they have to address a range of issues, starting with:

1. Identify key client goals and how you achieve them, such as what are the client's goals were and how exactly are you achieving them.
2. Second, identify key difficulties and how you surmounted them, focusing in on very specific issues. It might be management structure, exits, special allocations of losses for tax purposes. It might be intellectual property issues. As long as they tell me what they did. That is the key.
3. And then, finally, in the second to the last paragraph, I tell them draft the document. They can do the whole thing or the major portions of it, but I want to see a final document.

For the other part of this, look at the last sentence of the second paragraph. We talk about conflicts of interest because in most of these start-up deals, unless there is one person, the lawyer may represent multiple clients. In one of the sessions I was in yesterday, we talked about how that's a recurrent problem in transactional practice: conflicts. Well, students are glib at citing the code and the Model Rules as to informed consent. As long as

you get informed consent, blah, blah, blah, they can tell us perfectly what is okay and not okay. After they do this assignment, they realize how many tradeoffs they make or help their clients make, and they become very reluctant to represent more than one client. I talk to them about this. There is nothing wrong with it, but I want them to see this: the Rules are designed to encourage multiple clients. And it's a lawyer protection rule. You get informed consent and you can represent people, and they see by going through this experience how challenging it is. Most of them are very uncomfortable with it.

These memos, in my experience, allow students to use a genre that they know, the expository memo, to organize and express why and what they are doing in another genre, a dispositive document, with which they are very unfamiliar. It is a pedagogical technique. I'm not suggesting that anybody in Mike's law firm is going to ask for an analytical memo. It is a bridging, pedagogical, teaching technique to help them transition from explaining, which they understand from first year memos, if not college, to actually doing. The goal is simple: explain what you did. Explain why you did what you did and then actually do it. So it is decidedly a pedagogical technique. I don't suggest it is a lawyer's document. I do think it helps students draft. Many of them tell me they thought they would be drafting the memo first and then drafting the document. In fact, they prepare them in parallel because as they are drafting they think "what am I doing," then they explain something and say "well, I didn't really do that," so it tends to be a back and forth drafting process.

Conclusion

I certainly don't think that every drafting exercise and every drafting course must be intellectually demanding. That is not what I'm saying. I do, however, believe that in transactional lawyering courses there are wonderful opportunities to help students see the connection between interesting and very challenging legal subjects, on the one hand, and the craft of lawyering on the other. At this juncture in legal education, I think there is a stronger body of resistance in skeptics than we might believe. Highlighting the intellectual demanding nature of this work can help overcome some of that resistance as well as help our students.

QUESTION AND ANSWER SEGMENT

QUESTION FROM BRENDA SEE[29]

Your program seems very time intensive for professors. How many credits do you teach them in a semester in their third year, and how does it affect your time for scholarship?

LYMAN JOHNSON

Great questions, and that's where a lot of colleagues balk. For me, this is my entire teaching load that semester: one five-credit class. Students will take a couple of these with some public service requirements and some professionalism requirements. What this does, and the biggest knock on this, is its effect on the dreaded C-word: coverage. As my colleagues say, well, what about coverage, and it's a legitimate concern. But if we're going to have real coverage, students are going to be in law school for ten years. And if you look at

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what was taught in the 1970s, when I came out, and what was available then versus now, I shouldn't have been going to law school for three years. It probably should have been there about a year and a half, based on the law. So it's a legitimate issue.

Now, what I try to do to address the coverage concern is, as an example, for those who haven't had securities regulation, I give them a down and dirty on securities regulation. I give it to them in two weeks, as if I am going over to Germany to try to explain German lawyers what we do, and that is kind of what it is like talking to them. There are compromises, and there are tradeoffs, but this is my own personal view: that they are worth it. For example, it does take me out of teaching other standard courses, and it probably does limit the number of courses that students can take. It means they really have to place premiums on planning that second year. Now there is some talk at our school about opening it up so that you can take one standard course at the same time. So that would serve as sort of a safety valve, maybe take one two credit course each semester, just to give a bit more coverage. But is that responsive?

BRENDA SEE

My other question was about your scholarship. Does it cut into the time of your work involving your scholarship?

LYMAN JOHNSON

I don't think so because this work is what I would call "lumpy." It doesn't come down the assembly line in smooth fashion the way giving lectures does, like three hours a week or whatever. It seems more like a batch. You do a lot of work for a while, and then less work. A lot of work, then less. So it means I have to regulate my schedule week by week because I can't plan on the same work week for 14 weeks, but it certainly gives me a lot of free time to do my scholarship.

QUESTION FROM JEFFREY LIPSHAW[30]

It occurred to me that at least in meetings or in the groups that I have been in, we haven't talked about drafting as it really is, which is not writing. It's going to an old closing book or an old form or a sophisticated buying agreement. And often times it's a process. I suspect Lyman has some ideas on this process of looking at something that is written and trying to figure out if it fits your deal. When you're a young lawyer, you are looking at a provision, and you have no clue why this particular paragraph is in the document, and even worse, what it is you might do to change it. But there might be market, so to speak, on a particular provision. How in your courses can you address that kind of thing? The problem is that most young lawyers deal without requisite knowledge.

JOAN HEMINWAY

I do encourage the use of precedent transaction documents in my course. In fact, to identify the extant drafting issues, I ask in my request for proposals for each student's substantial written project that the student identify five precedent transactions in the proposals. I tell the students to compare and contrast the different provisions in the five transactions. I failed to highlight one of my pedagogical techniques in my presentation, which is having in-office meetings that each student is required to come to as well. We talk

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through decisions on how to use these precedent documents in the same way that one would if the student was a junior lawyer in a firm, and he or she was handed a bunch of precedent transaction documents by a senior person in the firm. The junior lawyer would look at the set of documents and say, "Oh my gosh, those deals all have different provisions in them. Some of the stuff is the same; I can see what the core values are in many of the provisions. But there are still a lot of decisions to be made here and I am ill-equipped to make them." Then, the junior lawyer would go to a more senior person, not necessarily or optimally the same senior person who is supervising the project. (If you want to look smart as a junior associate in a firm, you find someone other than the supervising attorney who has done a deal recently like the one you are working on, and you get advice from that other person. Then, you craft a provision and hand it back to your supervising senior person for review, having gotten advice from another senior person.) That's one way in which my students are using precedent transaction documents.

Obviously, the student is going to choose the best model and alter it based on those conversations with me, and I might refer him to an article or two to help frame his decision-making. In fact, I often have referred students to an article co-authored by my copanelist Mike Woronoff when it comes to anti-dilution provisions.[31] After the student has reviewed the article(s), we can have a more educated meeting. ("Read this and then come see me, and we will talk through the issues. My time is limited: I am a senior partner. I don't have a lot of free time to explain things to you.") So, that's one way in which I use precedent transaction documents in my course. Lyman, do you do that, something similar to that, in business planning?

LYMAN JOHNSON

Yes. I do think there is some value in not giving them a good document right away. I give them a document, as you can see in the assignment, from another state. I can't remember if it was manager-managed or member-managed, but something a little bit off. So, a little bit of a clinker, because I want them to look at something that doesn't really work because it is always easier for students to react to writing than to create their own writing. I mean, we are all better editors than we are original writers. So we try to get at it that way. If they are just simply fumbling around, I agree with Joan that I better provide some guidance. But I do tell them not to put anything in that agreement without knowing why it's in there, because I'm going to ask you then what it means. If they've got the Skadden Arps 703(b) special allocation of tax losses language that goes for four pages, and I ask them what the third paragraph means, they better be able to sit there in my office and tell me why that's there. So, suddenly, that does get a lot of the fluff out of there.

MICHAEL WORONOFF

Every year I assign my class a confidentiality agreement drafting exercise. As part of the exercise, students are required to find five precedents. The first year I used this assignment, half the class brought back legal opinions, because they thought precedents meant legal opinions. The next year, I found a great article by Ken Adams that discusses

[31] Michael Woronoff & Jonathan Rosen, *Understanding Anti-dilution Provisions in Convertible Securities*, 74 FORDHAM L. REV. 129 (2005).

using agreement precedents, it's about two or three pages long.[32] I give that out now. It is remarkable how much that has helped.

QUESTION FROM MARY TREVOR[33]

I am curious about the extent to which some of you have talked about group work and encouraging students to group together. I'm curious about the dynamics and observations that you have about those in two areas in particular. How do you determine the composition of the groups? Do you let the students determine that? And as the students work in the group goes, do you run across what Lyman referred to as one person running the show or somebody who is just there along for the ride? How do you deal with that? Do you have suggestions for that kind of thing?

LYMAN JOHNSON

Yes. It is something I struggle with still because I tend to know students pretty well. I assign them. I try to match them up in ways I think will work. I will say this though. One time, about ten years ago, a colleague told me that I should pit the best students in my class against the other best students in any negotiation because he said that spreading the talent around is not fair. I tried that once. It was great, but I generally try to spread talents and personality. It's really hard for me to monitor what's going on with the free rider/control freak dynamic. I can tell who the free riders are, or those who I think might be. You know the control freak is happy to have the free rider type take a free ride. That's the nature of it.

The other dynamic is the person that wants to start yesterday versus the one who says I work best under pressure. I tell the former, "The person that works best under pressure isn't bothered by the fact that you want to start yesterday, but they are driving you nuts, aren't they?" You want them to start yesterday and they are thinking they have got plenty of time. So realize that some match-ups are going to aggravate. I figure some of that is just life. The hardest problem for me is how do I really get at who did what. The in-office meetings help me a little bit because if somebody does not seem engaged, I wonder whether they are pulling their weight. I have gone to voluntary, not mandatory, peer assessment. But W&L is a very "gentlemanly," civil culture, and students don't want to talk trash about each other. So I'm thinking about going to mandatory peer review. But I continue to struggle with that.

MICHAEL WORONOFF

I take the students who get along the least and put them together on the same team. It's really enjoyable to watch what happens.

JOAN HEMINWAY

In my course, we use two different types of group exercises, and I consciously use two different group formation techniques to mix it up a little bit. In the teaching group exercise, which typically involves groups of two or three students teaching as a team, I allow the students to choose their own partners.

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[32] Adams, Ken, *Drafting a Contract*, NY L. J. (2002) *available at* http://www.adamsdrafting.com/downloads/NYLJ-Drafting-a-Contract-9.27.02.pdf.

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When we meet to prepare for the class meeting that they will teach, I give them a framework of about ten questions that I want to make sure they cover. They have to meet four requirements in teaching the class. One is that they have to cover the material, so that's why I give them coverage questions. The students also have to relate the class material to a planning or drafting issue and teach using that issue (since the course is a planning and drafting course). They have to meet a specific time limit in what they are doing, and finally, they have to engage the remainder of the class. This last requirement incentivizes the remainder of the class to prepare for classes in which their colleagues are teaching. I think we've all seen expert exercises where only the experts do the reading and the rest of the class sits there passively and watches them teach. That is not the point of this course or the team teaching experience. So, they have an engagement piece of the exercise. Those are the four component pieces—substantive coverage, planning and drafting instruction, compliance with time limits, and class engagement.

Before the class meeting, I ask the students whether they want to be graded together or separately. Some groups arrange their presentation of the material so that it gets split evenly between or among them and they present the material using a tag-team approach. This makes it easy for each student to request a separate grade. Other forms of presentation do not easily lend themselves to individualized grading. I give the students a lot of flexibility in how to organize their teaching experience. They may, for example, engage the class with interactive quizzes or the like. So they get the choice as to whether they rise and fall together on their group teaching project. That's pretty rare, however, in my pedagogy.

For the in-class drafting exercise involving a notice of redemption for a debt instrument, however, I choose the teams. It's graded as part of their participation grade for the course, and they are allowed to choose their own spokesperson for different areas in drafting the debt redemption notice.

In another class, I have used peer review to reinforce constructive group norms. I don't use peer review in group exercises in my Corporate Finance class, however.[34] For the peer review, I have a template evaluation rubric that each student has to file with me. I've done it in several different ways over the years. One evaluation rubric asks about what the evaluating student undertook on the project and what the other student or students undertook. I may ask what the student thinks the strength and weakness of the project is. I want to try to ensure that the peer evaluation is not merely a direct dissing of other students.

I had one student question me once, about why the review memorandum is graded non-anonymously and why I was asking him to disparage the work of one of his colleagues. I told him that was not the purpose of the review memorandum. I told him that I was asking him to substantively review his colleague's work and critique it and undertook to illustrate that there is a big difference between substantive critique and disparagement. I also noted that the evaluation of work is not anonymous in the workplace in real life, and that he should start getting used to being evaluated and to evaluating others. Most are third-year students in this class, but there are some second-year students, and they are still attached to anonymous grading from the first year of law school—the whole "I don't want anybody to exercise a bias in judging my work" deal. I do evaluate both the substantial written assignments and the peer review memoranda using rigorous grading sheets. So if a student has a question as to why I came to a particular grade, those grading sheets can be matched to

[34] The review project in the corporate finance class does represent peer review, but it is an individual, not a group, exercise.

the assignment grade. If students then come in to discuss their grades, all we then have to discuss is whether I've applied the grading metrics fairly or not. I use ranges of points for each evaluation metric, so there is some discretion involved in the grading process.

QUESTION FROM BILL CARNEY[35]

I have sixty-five students in Corporate Finance. That rules out some of these techniques that you have been using. Do many of you have any experience in transferring those techniques to larger classes?

JOAN HEMINWAY

Yes, I do writing in all of my courses. I tailor the number and type of writing assignments to the number of students and type of course. As you can imagine, if you have more than twenty students, well, it would be a lot of work to do what I do in this course. But I have had the opportunity to translate my writing exercises for a Business Associations course and for Securities Regulation where I teach larger groups. Part of what I do to preserve my own sanity is that I limit the length of the project. For example, in my Business Associations course, I give the students an exercise that is not a corporate finance planning and drafting exercise, but it will give you an idea of how to incorporate writing into a larger class setting.

After we have covered all the forms of entity in Business Associations, I ask the students to look at a specific form of entity in connection with a specific fact pattern (from a client memo written by an "absent" senior partner) and give me two or three, depending on the year, aspects of that particular form of entity that would be desirable for the clients based on the fact pattern. I also ask for one attribute of the form of business entity that would be undesirable for the clients based on the fact pattern. In each case, they must explain their choice by applying law to the facts. This lets students start balancing the different attributes of a form of entity in different contexts. Their required written submission on this consists of a memorandum of one page or less (with margin and font requirements, because I figured out in my first few years of teaching that students know how to decrease font size and margin widths to meet assignment requirements). I want to teach them editing too, which is useful to me as a reader and to them as a practice skill.

In my Securities Regulation course, I actually give the students a corporate finance assignment. I make them draft a portion of a prospectus. It varies from year to year. I give them different fact patterns, but they have to use a registration statement form and Regulation S-K. They have to look at the broader area of the law (usually as to materiality, which we already have covered) and precedent transaction documents (in this case, precedent disclosure of the same kind from other prospectuses that I supply with the assignment) and figure out what they need to put in their disclosure and how to present it based on the law, the regulations, and the fact pattern. I give them precedent disclosure for different types of issuers as models for comparison, so it is a closed-universe assignment. There is significant work involved in putting together that assignment packet. Again, the submission by the students on this assignment is a brief cover memorandum of no more than a page and usually just a small amount of prospectus drafting (well less than a page).

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In terms of class size for these two courses, in Business Associations we cap enrollment at 72, which is still small by some school standards for that course. So, twice in the semester, I review seventy-two short student writing assignments. I give the students generalized comments on the assignment as a whole and some specific ones on their own work product, and then I also do a final exam in that course. I do roughly the same thing in my Securities Regulation course, where I have a smaller population. It is not usually more than 22 students at The University of Tennessee. I also assign two small writing assignments in this course during the semester and use an oral mid-term exam and a written final exam as the principal summative evaluation tools. I will note that I did have the students do two writing assignments in a 60-student Securities Regulation class at Boston College when I was visiting there a few years ago.

LYMAN JOHNSON

I haven't done it with 65 students. I have done it with 45 in securities regulation. Therese Maynard at Loyola teaches like 100 students, and she has got some wonderful techniques. So she would be a resource. For any of you teaching classes with large enrollments, look up Therese Maynard at Loyola in LA.[36] She has really mastered this.

QUESTION FROM MARK OSBECK[37]

I have a real basic question for Michael. What one piece of advice would you give future transactional lawyers as law students?

MICHAEL WORONOFF

I wrote an article that addresses this a bit.[38] I'm a big believer in comparative advantage and think law schools should teach what they can teach better than law firms. That's substantive law.

When I am interviewing students, it drives me crazy how few have taken a course in securities regulations. They haven't had administrative law. They haven't had accounting. When I graduated law school, you could learn securities on the job. Today, that's just not possible. So my advice is, take as many substantive transactional courses as are available at your school.

JOAN HEMINWAY

Few students at The University of Tennessee are willing to sit through the gun-jumping rules, exceptions, and safe harbors for six, eight, or twelve hours or whatever we are now spending on them (because they are so crazy and complicated). So, not many students sign up for the full Securities Regulation course. I do a lot of securities regulation basics in my Business Associations course even though it is a four-credit-hour, one-semester course. I do have to teach some securities regulation in my Corporate Finance course because not

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[38] Michael Woronoff, *What Law Schools Should Teach Future Transactional Lawyers: Perspectives from Practice*, UCLA School of Law, Law-Econ Research Paper No. 09-17, *available at* http://ssrn.com/abstract=1430087.

every student has learned the basics well enough in his or her Business Associations course. (Business Associations is a prerequisite for my Corporate Finance course, and Business Associations is taught by three different instructors with somewhat different coverage and emphasis in any given year.)

MICHAEL WORONOFF

But it's really difficult to teach even more stuff in business associations. Think about how much is covered in the typical business associations class today: you have corporations, and LLCs, and partnerships, and agency. You have CSR. There just isn't enough time to do it all. And so, I would take as many substantive transactional courses as I could.

TINA STARK

I believe that we must graduate students with strong doctrinal backgrounds and with skills. At least half, if not more than half, of Emory's curriculum for the transactional certificate is doctrinal.

MICHAEL WORONOFF

I believe your slide this morning indicated that Emory requires students take securities to receive the certificate.

TINA STARK

Actually we don't make them take securities. They all have to come see me, and I ask them what they want to be when they grow up, and then I tell them that they have to take securities. Securities is not required, but they all take securities.

MICHAEL WORONOFF

Right. If you look at most other certificate programs, you can basically do it by taking adjunct courses.

JOAN HEMINWAY

For our Concentration in Business Transactions certificate program, I periodically argue for making Securities Regulation a requirement. We graduate up to thirty students a year in our concentration program, and some of them have not taken a full semester of Securities Regulation. I think that is scandalous. If you are going to work in a business law setting, you need to have a strong background in securities regulation. I took two semesters of Securities Regulation with Helen Scott at the New York University School of Law back in the 1980s, and the scope of federal securities regulation has expanded in the 25 years since I took that course. The regulations are broader and deeper now. So, I don't know how you cover this complex regulatory system and its rules adequately in a bunch of courses, even if they are all required courses or offered as part of a business law concentration program.

BILL CARNEY

I always tell students that going out and giving your client a stock certificate book is like giving them a loaded gun. You have to really understand what you are doing and monitor what your clients are doing to protect them.

JOAN HEMINWAY

Right. In fact, I tell all of my students in my Business Associations course that if you are not thinking about whether or not the interests that people are buying are securities

every time you form a business association of any kind, then you're in trouble. Even if you are setting up a merger subsidiary (and I might have some disagreement from the crowd on this), I want you to know what exemptions you're relying on if you're not registering those 100 shares that you are issuing to the parent corporation so that you can do a triangular merger. You have got to think about it, and if you don't, you've missed the boat. A lot of the skills-based teaching we are doing in these kinds of courses is not necessarily something a lawyer will spend a lot of time writing or thinking about in real life; but if a law student has not gone through the mental exercise—if we don't teach students at the outset to go through that rigorous analysis—then they are more likely to make mistakes in practice because they are going to shortcut the analysis.

SPEAKER

I was telling Bill that if it is not a crime or a gift, then it is presumptively a securities transaction.

SPEAKER

A securities transaction may also be a crime.