

USING OUR BRAINS: WHAT COGNITIVE SCIENCE TEACHES ABOUT TEACHING LAW STUDENTS TO BE ETHICAL, PROFESSIONALLY RESPONSIBLE, LAWYERS

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EXTRACT

Throughout our lives, below the level of our consciousness, each of us develops powerful values, intuitions, expectations, and needs that powerfully affect both our perceptions and our judgments. Placed in situations in which we feel threatened, or which implicate our values, our brains, relying on those implicitly learned, emotionally weighted, memories, can "downshift," to primitive, self-protective problem solving techniques - fight or flight. Because these processes operate below the radar of our consciousness, we react without reflection or the opportunity for interdiction. Thus, it may be that automatic, "emotional" reaction, rather than thoughtful, reasoned analysis leads to our responses to stressful, questions of ethics and professional responsibility. Lawyers continually face complex, problems of great moment to their clients and the community, problems which implicate their own professional values. They need to learn to address these problems thoughtfully and effectively while carrying out their professional responsibilities as representatives of their clients, officers of the judicial system, and public citizens, exercising both their analytical skills, and moral judgment. To do so, they need to understand the emotional processes and the content of their intuitions, and have confidence in their ability to act appropriately. Unfortunately, traditional legal education focuses on teaching students "legal analysis" of a given set of facts, in which the answer is the formation of a legal rule, the role of the lawyer is to achieve the client's stated goal, and neither the lawyer's, nor any third party's, values are relevant. This paper analyzes recent discoveries in cognitive science that explain the brain's learning and problem solving mechanisms, and applies that scientific knowledge to demonstrate why traditional legal education may actually impair the ability to effectively solve complex problems, particularly those freighted with issues of personal values and professional responsibility. It then describes an alternative pedagogy, problem-based learning, that provides valuable insights to teaching law students to become ethical practitioners.

¹ Practice Professor of Law, University of Pennsylvania Law School. This paper has been several years in the making, and while I take full responsibility for it, I must express profound appreciation for the many people whose support and encouragement were essential to its completion. Professor Mike Rutherford, and Dr. Kathy Hirsh-Pasek to whom I first floated my thesis encouraged me to pursue it, despite my lack of scientific background, and pointed me in the direction to learn the essential background science. When I had completed a draft, Dr. Hirsh-Pasek, Dr. Julio Kuperman, and Dr. Matthew Lattel gave me helpful suggestions for making the scientific portion more precise and understandable. The folks at the UCLA/University of London IALS Fifth International Conference on Clinical Legal Education, encouraged me to present the paper even though I had completed only a preliminary draft, and Dr. Hirsh-Pasek and Michael Pasek convinced me of the appropriateness of presenting it aided by "power point," then taught me how to do it. My clinical colleagues at Penn, and the Mid-Atlantic Clinicians' Conference, and the participants in the Penn Law School Faculty Summer Colloquium listened patiently, and made very helpful suggestions for making the paper more accessible. I have been privileged to have been aided by an extraordinary group of research assistants over the past several years, including Steven Ebert, Stephanie Vogel, Elisa Behar, Tracey Sorens, Christine Hoyler, and Mariana Kuperman. I am especially indebted to researchers Adam Sundor and Theresa Keeley, Nicole Isaacs and librarian Merly Slyhoff, without whose thoughtful and tireless work, I certainly would not have completed the paper before retirement. Without the assistance of Sylvia Bloise and Kelly Colgan-Azar, this paper would still be purely a stream of consciousness rambling, totally without form.

I. WHAT ARE LAW STUDENTS TAUGHT ABOUT RESPONDING TO ETHICAL PROBLEMS?

A. EXAMPLES FROM “LAWYERING: THE REAL WORLD”

Case #1

A bright, honest and hard working fourth year associate, in whom all of the partners saw the potential for partnership, was investigating a discrimination charge brought by a former employee of the firm's client. She decided that a fellow employee might have some important information. After getting the client's approval to interview him, she telephoned him to arrange a meeting to discuss the case. The employee asked her whether the call was about some problem with his work. She told him “no,” that everything was fine with him, but that as counsel to the company, she needed to talk to him about a matter relating to another person she was investigating, whom she then identified. The employee also said that since he still saw the former employee from time to time, he did not want the former employee to know he said anything negative about him. The associate assured the employee that their conversation would be confidential. The employee then agreed to meet the next day at the law firm's office.

In fact, the associate did not know whether the work of the employee to whom she was talking was fine, nor had she been authorized by the client to tell the employee that. Moreover, while she was not a “blabber mouth,” she had every intention, in accordance with Rule 1.4 of the Rules of Professional Conduct,² to report to her client what she learned from the interview.

Case #2

Associate to Partner: “I've met with the client in the XYZ matter, gone over the interrogatories and document requests we got from the other side, reviewed our client's draft answers, and the documents they have found that respond to the requests. I think I have a pretty good idea of what we can answer and what we can object to as being unduly burdensome or not likely to lead to relevant evidence. Do you want me to draft a set of responses for you to review before they go out to the client, or to draft a memo to you explaining what I've found, and how I think we should respond?”

Partner to Associate: “As I recall, these are their first discovery requests to us, so why don't you object to all of their interrogatories and document requests? I am sure that you can find some basis to do so. When they come back to us to negotiate, which they have to do before they can file any motion to compel, we'll be in a better position to see what they really want and to negotiate from there.”

The associate left the partner's office, presumably to do as he had been instructed.

² See MODEL RULES OF PROF'L CONDUCT R. 1.4 [hereinafter “MODEL RULES”](stating that “[a] lawyer shall keep a client reasonable informed about the status of a matter and promptly comply with reasonable requests for information.” and “shall explain a matter to the extent reasonably necessary to permit the client to make informed decisions regarding the representation”).

In *Case #1*, the well meaning associate may have violated Rules 4.1(a)³ and 4.3⁴ of the Model Rules of Professional Conduct. First, she told the employee that he had done nothing wrong, implying that she knew that to be a fact, when she did not.⁵ Then, she represented to the employee that what he told her would be “confidential” in a situation in which he reasonably would have thought that she would tell no one else, although the “confidentiality” of which the lawyer was speaking does not prohibit her from telling her client, the employer.⁶ Indeed, she may be bound to disclose what she learns to the employer even if it implicates this employee in wrongdoing.⁷ At the same time, she may have violated Rule 1.6,⁸ when she disclosed to the prospective interviewee that there was nothing wrong with his performance, a fact that she could have learned only from the client, and made the disclosure without the client’s permission.

In *Case #2*, the partner may well be counseling the associate to violate Rule 3.1⁹ by asserting an issue - objections to the discovery requests - without a “basis for doing so that is not frivolous.” This would be particularly likely where the partner has not reviewed the discovery requests, and thus had no basis to assume that all of them were legitimately subject to objection. If the case is pending in the federal court or in the court of a state having a rule similar to Rule 11 of the Federal Rules of Civil Procedure,¹⁰ the partner may also be counseling the associate to violate that rule.

To me the examples¹¹ demonstrate two problems of professional responsibility: (1) an attorney who, in the daily pressure to zealously represent the client, simply does not bring to consciousness a significant question of professional responsibility; (2) an associate who is told by a more senior lawyer to do something that might well raise a significant question of professional responsibility, and fails to question the instruction, because he doesn’t recognize the problem, assumes there might be a problem but that the senior lawyer, being older, wiser and more experienced, knows better, or considers the ethical problem, but, fears demonstrating disloyalty to the client and/or the senior lawyer.

³ See, MODEL RULES R. 4.1 (a).

⁴ See, MODEL RULES R. 4.3.

⁵ See, MODEL RULES R. 4.1 (a) (stating that “in the course of representing a client a lawyer shall not knowingly: (a) make a false statement of material fact or law to a third person”).

⁶ See, MODEL RULES R. 4.3 (stating that “In dealing on behalf of a client with a person who is not represented by counsel, a lawyer shall not state or imply that the lawyer is disinterested. When the lawyer knows or reasonably should know that the unrepresented person misunderstands the lawyer’s role in the matter, the lawyer shall make reasonable efforts to correct the misunderstanding”).

⁷ See, MODEL RULES R. 1.4 (holding that “(a) A lawyer shall keep a client reasonably informed about the status of a matter.... (b) A lawyer shall explain a matter to the extent reasonably necessary to permit the client to make informed decisions about the representation”).

⁸ MODEL RULES R. 1.6 (explaining that “A lawyer shall not reveal information relating to representation of a client unless the client consents after consultation, except for disclosures that are impliedly authorized in order to carry out the representation. . .”).

⁹ See, MODEL RULES R. 3.1 “A lawyer shall not bring or defend a proceeding, or assert or controvert an issue therein, unless there is a basis for doing so that is not frivolous, which includes a good faith argument for an extension, modification or reversal in existing law.”

¹⁰ See, FED. R. CIV. PRO. 11.

¹¹ Both of these incidents arose at highly respected law firms. In the course of my exposure to litigation as a law clerk for a federal district court judge and as a lawyer for more than 35 years, I experienced, first hand, and frequently heard of other, numerous incidents of these kinds of, at least arguable, ethical failings.

Case #3

Attorney was representing a parent in a custody dispute involving their 10 year old child. The parents had been separated since the child was six years old. The opposing party had “primary” custody and the client had “partial” custody (or “visitation”). Client had begun the custody proceeding desiring to obtain primary custody, believing that he/she could be a better parent. The child, however, was thriving in the current living arrangement, physically healthy, doing well in school both academically and socially, demonstrating appropriate behaviors at home, with the client during weekends and extended times there, at school, and with friends in the neighborhood. In addition, the child had recently begun singing in the church’s children’s choir and seemed to enjoy that activity very much.

Shortly before the date of the hearing, the client arrived at the lawyer’s office to prepare. The client informed the lawyer that he/she had some new information that should help considerably. The client had recently learned that the custodial parent had been living with a partner of the same sex in a homosexual relationship. The lawyer responded by asking how client believed that relationship might affect the child. The client responded that homosexuality was immoral, and that living in a household of such blatant immorality would permanently damage the child, and perhaps lead the child to adopt homosexuality as a way of life. The lawyer sought, but got nothing more from the client in the way of evidence of harm to the child.

Under the law of the state in which the matter was pending, a parent’s sexual orientation is entirely irrelevant to custody unless there is evidence that it is causing some harm to the child. The client’s fear that the child was in a sinful environment based upon the homosexual relationship of the other parent is a matter of religious difference between the parents and, absent some palpable harm to the child, that too, was irrelevant.

At the same time, the lawyer knew that the judge before whom the matter was to be heard had a reputation as a homophobe. The lawyer believed that if the situation was brought to the judge’s attention, he would likely decide the matter in his client’s favor, and that if there was an appeal, the judge would write an opinion explaining the decision on grounds totally unrelated to the evidence of the other parent’s homosexuality.

Should the lawyer, in an opening statement, in questioning the opposing party, or in some other way, bring out the issue of the other parent’s living situation in order to influence the judge? I have asked that question on many occasions to law students and lawyers. Almost to a person, the unhesitating response is that the lawyer, in the zealous representation of his client, should find a way to reveal the living arrangements even without any evidence of adverse affect on the child. If opposing counsel fails to object, or if he does object and the objection is overruled, that is not the questioner’s concern in our system. As to what the judge decides, and how he explains his decision in an opinion, that is up to the judge, not the lawyer.

“But what about Rule 3.1?”¹² The answer, invariably, is that as an advocate for my client in our adversary system, I don’t have to make objections to my own questions, that is for my opponent;

¹²See, MODEL RULES R 3.1.

nor do I make the rulings on evidence, that is for the judge, and Rule 3.1 doesn't require anything else. Occasionally a lawyer or law student seeks to "fight the hypo" by arguing that if my client thinks that living in the other parent's household is harmful to the child, perhaps it is, in some way we don't yet understand. Thus, the question is not improper. Rather than even concede that there is an ethical question, the law students and lawyers present arguments (the zealous advocate in the adversarial system) for their client's desired position.

The associates in both cases #1 and #2 graduated from excellent law schools, and had been on their respective school's Law Review. Presumably both had passed the school's course on legal ethics, as well as the MPRE. The lawyer in case #3, a pre-1974 law school graduate, was experienced and well respected among his peers. If you asked the first associate directly whether it is permissible to lie to a witness about some fact relevant to the witness, whether she was free to disclose information about the employee's employment with a client without the client's permission, or whether she was free not to tell the witness that her interest as counsel for the client and his interest might be adverse, I have no doubt that she would have quickly answered, "No" to all three questions. If you asked the associate in *Case #2* whether he had an obligation to respond to discovery requests in good faith, rather than simply delay and force the requesting party to negotiate without any good faith objection to particular interrogatories or document requests, I suspect that he would have answered in the affirmative. Indeed, I am quite certain, knowing the partner in case #2, as I do, that if the partner was asked a similar question in a general form, not related to a specific matter in which he was involved, he, too, would have immediately answered "yes." If you had asked lawyer # 3 if it is permissible to proffer evidence one knows to be inadmissible, I believe that he would have answered in the negative. So, why had each of these lawyers acted as they did?

*Case # 4*¹³:

There is a scene at the beginning of the movie, "PHILADELPHIA"¹⁴ in which Tom Hanks comes into Denzel Washington's law office seeking representation to sue his former law firm for wrongful termination. Hanks is a young lawyer who has recently been fired because, he believes, the firm's management discovered that he had AIDS. Washington, an apparently successful, contingent fee, plaintiffs' lawyer, declines the representation because of Hanks' illness. What gives the scene particular bite is that Hanks was preceded into Washington's office by a man who wanted representation to sue the city for negligence. It seems that there was a hole in the middle of the street where the city was having some construction done, the location was in mid-block, rather than in a pedestrian crosswalk, and the construction site was clearly marked off by yellow warning tape. Nevertheless, the prospective plaintiff managed to find and fall into the hole. Even Washington seems surprised, after asking in vain for evidence of mitigating circumstances, to find that the man still wants to sue. Despite these extraordinary facts, Washington readily agrees to represent the injured man, and even refers him for examination by a doctor that Washington apparently uses in such cases.

¹³ While this example is from a movie, as opposed to the actual experience, the reality that many of us see every day is that civil legal services organizations seem forever to be narrowing the scope of cases they can take, and closing intake of new cases, while bar association pro bono organizations are always short of volunteers, even for cases that appear to have merit. *See id.*

¹⁴ [Cite]

B. LEARNING DOES NOT NECESSARILY LEAD TO DOING.

Learning the Rules of Professional Conduct does not necessarily lead to ethical practice.

“Moral life is not to be confused with test meant to measure certain kinds of abstract (moral) thinking, or with test that give people a chance to offer hypothetical responses to made-up scenarios. We never quite know what will happen in this life; nor do we know how an event will connect with ourselves”¹⁵

The associate in *Case #1* was assigned to obtain information for her client’s defense of a claim against it. Her conduct was both logical and truthful, and her purpose innocuous. While truthfulness and benign purpose are relevant, they are not sufficient to satisfy the Rules of Professional Responsibility. She had probably studied Rules 1.6, 4.1, 4.3, and 4.4 in her Professional Responsibility course and in preparation for the MPRE.¹⁶ However, in all likelihood her study of those rules was explicit – the class knew in advance that the treatment of those rules was to be covered in the readings and class. And more likely than not, the cases and hypos would have focused on sharing information that might be harmful or embarrassing to the client, sharing information which the client does not want shared (Rule 1.6),¹⁷ or speaking or withholding information in order to take advantage of the third party. (Rules 4.1, 4.3, and 4.4)¹⁸ Here, that was not the case. Hence, whatever memory she retained about the application of the Rules of Professional Conduct from those classes would not necessarily connect with the cues from her experience in “real life.”

The associate in *Case #2* may have had a similar non-recognition experience to that of the associate in *Case #1*. However, let us assume that he actually did consider whether the instruction from the partner was ethically appropriate. At that point, he would have faced a dilemma. Should he, a young and aspiring associate, question a more senior lawyer, especially where that lawyer’s directive seems more likely to serve the client’s goal of the successful outcome of the litigation – a goal which the associate is bound to pursue, under Rule 1.2(a) of the Rules of Professional Conduct?¹⁹ The associate has been taught both in law school, and since entering practice, that he is bound to pursue the client’s lawful goals. Should he deviate from that precept in a matter which would require him to question the partner’s ethics? Answering that question could lead to sweaty palms, or worse.

¹⁵ David Coles, *Moral Life of Children*, 29 (BOSTON, ATLANTICE MONTHLY PRESS 1986)

¹⁶ She might also have had a course in employment law; however, unless she attended a school that had adopted Deborah Rhode’s “Pervasive Method” of teaching ethics, DEBORAH L. RHODE, *PROFESSIONAL RESPONSIBILITY: ETHICS BY THE PERVASIVE METHOD* (2d ed., 1995), or something similar, it is unlikely that concern for ethical questions which might arise in the course of investigation of an employment case would have been included in such a course.

¹⁷ See, MODEL RULES R 1.6.

¹⁸ See *id.* at R. 4.1, 4.3. See also MODEL RULES R. 4.4 (providing that “In representing a client, a lawyer shall not use means that have no substantiated purpose other than to embarrass, delay, or burden a third party, or use methods of obtaining evidence that violate the legal rights of such a person.”)

¹⁹ MODEL RULES R. 1.2(a).

What does the associate's brain do when faced with this problem? The associate needs, in Case #1, to secure the witness' information in order to be successful in representing her client, and thus satisfying her boss. In Case #2 the associate needs to avoid conflict with his boss. As I will argue below, our motivation significantly affects our analysis of problems with which we are faced, even when those goals appear to conflict with the clear meaning of the data.²⁰ Thus, in both cases, the associates' needs powerfully affected their judgment as to what behavior was appropriate, despite what they might know about the constraints of the Rules of Professional Conduct. When the conflict between our goals and other values is serious enough to produce severe stress, our brains might well "downshift" into survival mode -fight or flight.²¹ In Case #2, fight is not readily available, since there is no one with whom to fight except the partner, and that doesn't seem likely to make things better. If he challenges the partner's ethics, even if he is right, and almost certainly if he is wrong, his job, his income, his future as a lawyer may be in jeopardy? Flight, for the associate in this case, means denial that this is his problem. That is, acceding to the assumed wisdom of the partner. Alternatively, the associate might think that he *might* be right even if he is only a second year associate. In that case the "flight" response is to return to the "tried and true," that is, to some problem solving mechanism that he has used successfully in "the law" before.²²

Inevitably, we look for solutions to problems we face by first scanning our memories for similar situations, and applying the principles and methods that we used in those situations. In the case of lawyers, particularly newer lawyers, our memories for solving legal problems were created in law school.²³

I suggest that the fundamental problem solving principles that our students are taught in law school are:

1. The answer lies in the formulation of a legal rule;
2. My role as a lawyer, i.e., a "zealous advocate," is to help my client achieve his goal, regardless of what the law seems to be. Lawyers help their clients achieve their goals principally by building arguments that will lead to the application of the desired rule of law to the client's situation.
3. Neither my personal values, nor the interests of third parties are to be considered in the pursuit of my client's goals.²⁴

²⁰ See, ZIVA KUNDA, SOCIAL COGNITION, MAKING SENSE OF PEOPLE 211 (Mass. Inst. of Tech., 1999) (noting that "[M]otivation and affect influence judgment by influencing the cognitive processes we engage in to arrive at a judgment. Both motivation and affect may influence which concepts, beliefs, and rules we apply to a judgment; we may be especially likely to apply those that are congruent with our goals and moods. Motivation and affect may also influence our mode of processing information, determining whether we rely on quick and easy inferential shortcuts or rely on elaborate systematic reasoning.")

²¹ See discussion *infra*, p.23.

²² See discussion *infra*, p. 23.

²³ See *id.*.

²⁴ See discussion *infra*, pp. 15-16.

Applying those principles, the associate in case #2 might examine Rule 3.1, the apparently governing legal rule:

“A lawyer shall not. . . defend a proceeding, or. . . controvert an issue therein, unless there is a basis for doing so that is not frivolous, which includes a good faith argument for an extension, modification or reversal of existing law”²⁵

Perhaps he would argue that Rule 3.1 does not apply because non responsiveness to discovery requests is not “defend[ing] a proceeding or controvert[ing] an issue therein...” thereby obviating the fear of violation of the Rules. He can then go back to the individual discovery requests and re-examine them to see if he can so interpret them as to find a basis for asserting that “the information sought [does not] appear reasonably calculated to lead to the discovery of admissible evidence” under Rule 26 (b)(1)²⁶ or come up with some other acceptable objection. Since, whether this process satisfied his personal values or unduly burdened the opposing party or its counsel is irrelevant under the “three principles,” his post-hoc rationale, carried out in accordance with his law school learning about how to be a lawyer, would provide him with a basis, morally justifiable to himself, for following the partner’s direction.

Similarly, in *Case #3*, the lawyer may well resort to the above principles by first making an argument that the introduction of the inadmissible evidence does not raise an ethical issue based upon the argument that the admissibility of the evidence in question is not a “proceeding” or an “issue” in a proceeding, because the latter refers to a substantive issue. Alternatively, it is simply not part of his “role” as a zealous advocate for his client to avoid proffering evidence merely because the other party might object and the judge might sustain the objection. The attorney might also argue that he is, in good faith, arguing for “an extension, modification or reversal” of the otherwise applicable rule as to the admissibility of such evidence, or at least that he needs to preserve his ability to do so on appeal by raising the matter at the trial level.²⁷

What’s Wrong With this Picture? And Why?

In each of the examples, the lawyer was faced with a situation which posed a complex problem with significant risks - problems that threatened to lead them away from “zealously,” and perhaps successfully, pursuing their clients’ expressed goals. In case #1 the problem was how to get important information from an individual who was fearful that disclosure that might harm her. In case #2, the problem was responding to discovery without giving away information unnecessarily, and when a more senior lawyer has told you to respond in a manner that you think might be unethical. In case #3, the problem is how to win the case, and appear to be zealously representing your client, while not using evidence that, to the client is clearly both critically relevant and highly persuasive, but to the experienced lawyer is clearly inadmissible. Lawyers

²⁵ MODEL RULES R. 3.1.

²⁶ See FED. R. CIV. P. 26(b)(1) (claiming that “Relevant information need not be admissible at the trial if the discovery appears reasonably calculated to lead to the discovery of admissible evidence.”).

²⁷ See FED. R. EVID. 103(a) (2) (explaining the concept of offer of proof – “In case the ruling is one excluding evidence, the substance of the evidence was made known to the court by offer or was apparent from the context within which questions were asked. Once the court makes a definite ruling on the record admitting or excluding evidence, wither at or before trial, a party need not renew an objection or offer of proof to preserve a claim of error for appeal.”).

face such situations frequently. Indeed, it can be said that the most important work that lawyers do, is to solve complex problems whether of ethics, or otherwise.²⁸ While law schools make some effort to teach students analytical tools for addressing those situations, the curriculum and pedagogy of most law schools effectively teaches them only a very narrow range of problems, using a very narrow range of their problem solving tools.²⁹

Observing Denzel Washington's choice not to represent Tom Hanks in PHILADELPHIA, one might argue (as many of my students have) that a lawyer in private practice is free to decline to represent anyone that he/she chooses. Yet, we also know that our legal system assumes that competent representation is essential for anyone who seeks redress in our courts. The Supreme Court has held that representation is mandatory in serious criminal cases³⁰ though not in civil cases.³¹ However, the Model Rules encourage lawyers to engage in "pro bono publico service", and cases such as Hanks' fit precisely within the classes of cases identified in the rule.³² The fact that Hanks had been turned down by ten other lawyers, and that Washington was his last hope did not move Washington, even to make the superficial inquiry about the potential legal merits of the claim, as he had with the previous client with a facially questionable claim.

The four examples thus demonstrate, as Robert Coles argued,³³ that knowledge of the rules and legal analysis that we teach do not necessarily lead to ethical, professionally responsible, action.

And while law schools regularly give public kudos, to lawyers who perform work in the public interest, in their classes, they provide no exposure to difficult questions concerning how students' personal values should influence their professional choices of clients, or their professional behavior, what, if any, pro bono work to do, how to balance pro bono work with fee generating work, or how to deal with superiors in one's law firm whose focus may be on billable hours and litigation outcomes, rather than on the aspirations of Rule 6.1, or some concept of ethical and professional practice. Consequently, students emerge from law school either not steeped in the values of public service and the responsibility of lawyers to assure that individuals have access to legal services, or they lack the tools to navigate both the economic demands of the private

²⁸ Gary L. Blasi, *What Lawyers Know: Lawyering Expertise, Cognitive Science, and the Functions of Theory*, 45 J. LEGAL EDUC. 313, 315 (1995) (promoting the use of cognitive science to help understand how lawyers make decisions and arguing that in order to be more effective problem solvers, students need practice solving problems, a skill not emphasized in most law schools); KARL N. LLEWELLYN, *THE BRAMBLE BUSH: ON OUR LAW AND ITS STUDY*, 101 (1951) (arguing that lawyers, through "human ingenuity," keep the law and the legal system, as well as the legal tools available to commercial enterprises, on pace with our constantly evolving society); Alan M. Lerner, *Law & Lawyering in the Workplace: Building Better Lawyers by Teaching Students to Exercise Critical Judgment as Creative Problem Solvers*, 32 AKRON L. REV. 107, 109-112 (1999) (emphasizing the importance of lawyers exercising critical judgment in solving problems); Paul Brest, *The Responsibility of Law Schools: Educating Lawyers as Counselors and Problems Solvers*, LAW & CONTEMP. PROBS., 5, 6 (1995) (criticizing law schools' failure to adequately prepare students in skills beyond doctrine and legal analysis and proposing as an alternative courses which integrate "insights" from disciplines such as economics, psychology, and business); Thomas D. Barton, *Conceiving the Lawyer as Creative Problem Solver: Introduction*, 34 CAL. W. L. REV. 267, 267-270 (1998) (stressing the importance of creative problem solving in law).

²⁹ Blasi, *supra* note 28, at 319, 359-360, 386-387; See also, Steven I. Friedland, *How We Teach: A Survey of Teaching Techniques in American Law Schools*, 20 SEATTLE U. L. REV. 1, 12 (1996).

³⁰ See, *Gideon v. Wainright*, 372 U.S. 335 (1963).

³¹ See, *Lassiter v. Department of Social Services of Durham County, North Carolina*, 452 U.S. 18 (1981).

³² MODEL RULES R. 6.1(a) (1) and (b) (1) and (2) (ABA) (quote).

³³ ROBERT COLES, *SUPRA*, NOTE 15, AT 29

practice of law, and the urgings of Rule 6.1, as they reflect genuine need within our communities. And, when confronted with ethical problems, they make arguments to justify doing what will most likely lead to the result sought by the client, or the senior partner, regardless of the spirit of the rules, their own values, or the public interest.

Thus, the legal academy should be asking, whether the prevailing curriculum and fails to support, or may actually impede students' development as effective, professionally responsible, moral lawyers, and whether we can do better.³⁴

One reason for our persistence on this path is, I believe, that we have not incorporated into our teaching scientific discoveries over the past two or three decades about how people learn, what inhibits and enhances the effective use of what we teach, and the effective use of learning to address emerging problems, particularly when those problems are professionally threatening to them.

The legal literature contains a number of examples of experiments with teaching professional responsibility using experiential methods.³⁵ There are also articles which seek to explain why experiential pedagogy can be expected to produce more effective learning in this area than other methods.³⁶ Conversely, I have, too often, heard from fellow law teachers that, starting with students who have spent the first 22 or more, formative years of their lives developing their character - for better or for worse - our three years of law school cannot possibly be expected to

³⁴ In 1998, Professor Susan Sturm and I developed a first year elective course designed to teach problem solving to law students in the second semester of the first year, by creating a series of simulations in which they would be placed in role and asked to create a solution to the problem. Lerner, *supra* note 28, at 109-110 nn.2-3. In the first role play in which the students were assigned to represent one of four parties engaged in a dispute, we asked them to prepare a letter to their respective clients explaining the case and making a recommendation as to what the client should do. Although the problem did not say that litigation had been started, or even was contemplated, by any party, every student assumed that they were already in litigation in court, and addressed only the potential litigation strategies in their letters to their clients. *Id.* at 123-124.

³⁵ See e.g., Douglas N. Frenkel, *On Trying to Teach Judgment*, 12 LEGAL EDUC. REV. 19 (2001) (sharing the author's experience teaching professional responsibility to upper-year students through the use of real world dilemmas that evoke student responses on both an intellectual and emotional level, student participation, and occasional role plays); Eleanor W. Myers, *Teaching Good and Teaching Well: Integrating Values with Theory and Practice*, 47 J. LEGAL ED. 401 (1997) (relating the author's experience teaching the two semester "Integrated Transactional Practice" course which includes trusts and estates, professional responsibility, interviewing, negotiating, counseling, and drafting); Steven Hartwell, *Promoting Moral Development Through Experiential Teaching*, 1 CLINICAL L. REV. 505, 522-528, 532-535 (1995) (discussing the author's experience of how teaching a professional responsibility course centered on student group interaction and collaboration to solve problems rather than teacher led discussions improved the students' moral reasoning); David Luban & Michael Millemann, *Good Judgment: Ethics Teaching in Dark Times*, 9 GEO. J. LEGAL ETHICS 31 (1995) (discussing the authors' incorporation of a legal ethics course with a clinical one in which students met weekly specifically to discuss ethical issues arising in their clinical work); Barton, *supra* note 2); SYMPOSIUM, TEACHING ETHICS, 58 Law & Contemp. Prob., (Summer/Autumn 1995)(Collecting more than 20 articles discussing experiments in teaching legal ethics at various law school which received grants for that purpose from the Keck Foundation),

³⁶ See e.g., Blasi, *supra* note 28, at 315, 320; Anthony G. Amsterdam, *Clinical Legal Education - A 21st Century Perspective*, 34 J. LEGAL EDUC. 612 (1984) (hypothesizing that in the future, law schools will have realized that concentrating solely on teaching students doctrinal analysis and case interpretation is too narrow and ill-prepares them; rather, schools should focus on teaching students how to learn law from the exercise of practicing); Stephen McG. Bundy, *Teaching Legal Ethics: Improving the Required Ethics Course*, 58 LAW & CONTEMP. PROBS., 19 (1995) (discussing Boalt Hall's experiment with teaching the required professional responsibility course in the first year and the school's ultimate decision to return it to the upper-year curriculum).

have any impact on the ethics and professional responsibility of the graduates that we send out into the profession and the world.³⁷ Yet there is also evidence that professional school may be an ideal place to teach ethical decision making.³⁸

With that in mind, I propose to (a) examine recent discoveries in cognitive science about how humans learn and what affects their ability to apply what they have learned to new situations, (b) assess how that data relates to how we educate our students, and (c) identify approaches to teaching that I submit will enable us to help our students become more ethical, professionally responsible lawyers. Part II of this paper will discuss applicable scientific principles of learning and problem solving. Part III will compare those principles with the strategy, process, and effect of traditional Langdellian / Socratic teaching. In Part IV, I will attempt to demonstrate why experiential, highly contextualized, behaviorally oriented, problem based teaching is likely to be more effective than traditional pedagogy in producing lawyers who are ethical, and professionally responsible.

II. THE HUMAN BRAIN IS A PROBLEM SOLVING MACHING.

To use a modern business metaphor, learning and solving problems are part of the “core business” of the human brain. One cogent example is that of learning language. Virtually every child is born with the capacity to learn language. Without taking a single lesson, they learn to understand and communicate in the language, or languages, that are most prevalent in their environment. Where spoken language is the norm, they learn by hearing, then orally communicating. Where signing is the norm, they learn to understand and then to communicate in sign.³⁹ Only thereafter do they learn to communicate through reading and writing. Clearly “the brain” comes equipped to solve the problem of communication, and it accomplishes that goal by learning from its environment.

³⁷ See Luban & Millemann's discussion of “The Problem of Excessive Engagement,” *supra* note 35, at 83-86 (exploring how students often reexamined their positions and changed their viewpoints after participating in clinical work, but if their exposure was limited to classroom learning only, their views were unchanged); Susan P. Koniak & Geoffrey C. Hazard, Jr., *Paying Attention to the Signs*, 58 LAW & CONTEMP. PROBS., 118, 120 (1995) (promoting the importance of pervasively teaching legal ethics and noting that the failure to do so risks sending the message that there is no problem with behaving unethically); Geoffrey C. Hazard, Jr., *Symposium, The Legal Profession: The Impact of Law and Legal Theory*, 67 FORDHAM L. REV. 239, 240 (1998) (discussing the failure of law schools to teach ethics).

³⁸ See, James R. Rest, *Can Ethics Be Taught In Professional School? The Psychological Research*, in EASIER SAID THAN DONE 22 (1998).

³⁹ For a more detailed discussion see MARC MARSCHARK, PSYCHOLOGICAL DEVELOPMENT OF DEAF CHILDREN 98, 107 (1993) reviewing the literature reporting research as to language acquisition among deaf children, and concluding that “[s]ign language clearly can serve as an effective mode of communication for young deaf children and reveals typical stages of normal acquisition under certain circumstances.” *Id.* at 98. “[I]conic signs and arbitrary signs are learned with equal facility by children acquiring sign as a first language [and] unlike early gestures, are not necessarily tied to physical similarities in the world but represent true linguistic symbols at a stage of development prior to spoken words.” *Id.* at 107. Marschark concludes, “The sequence of emerging semantic relations in deaf children’s language production parallels that observed in hearing children, at least when manual deaf children are evaluated using sign language.” *Id.* at 126.

Another example is the use of logic. While there are substantial variances among individuals in their ability to use logic, the human brain seems to find logic compelling, if not irresistible. As Steven Pinker has observed,

All languages have logical terms like *not*, *and*, *same*, *equivalent*, and *opposite*. Children use *and*, *not*, *or*, and *if* appropriately before they turn three, not only in English but in half a dozen other languages that have been studied. Logical inferences are ubiquitous in human thought, particularly when we understand language.⁴⁰

A. THE BRAIN: A SYMPHONY in THREE MOVEMENTS

The most widely accepted theory of the brain's evolutionary development of functional specialization, first proposed by Paul D. Mac Lean, former director of the Laboratory of the Brain and Behavior at the U.S. National Institutes of Health, is that we have developed, over time, three discrete, though interconnected, areas of the brain.⁴¹ These areas are frequently referred to as the "R complex" or "reptilian" brain, the limbic system, and the neocortex.⁴²

The reptilian brain is the most primitive part of the brain. It is primarily involved with physical survival and operation of the "system" which is the body. It controls food processing (eating and eliminating), systems operation (heart, lungs, liver, etc.), reproduction, establishing and maintaining home territory (territoriality), various "group" behaviors, and execution of the flight or fight response.⁴³ Overall, R-complex behaviors are "automatic, have a ritualistic quality and are highly resistant to change."⁴⁴

The limbic system is primarily involved with the emotional system, with evaluating, organizing and directing incoming data for processing in the brain stem and the cortex, and with our awareness of ourselves, physically and emotionally. It is the focus of the creation of memories developed in the context of active living. Contextual memories are a composite of our inner and outer worlds - our history of emotional and perceptual experiences, and new information constantly arriving through our ongoing perceptions and experiences.⁴⁵

⁴⁰ STEVEN PINKER, HOW THE MIND WORKS 334 (1997).

⁴¹ Paul D. Mac Lean, *A Mind of Three Minds: Educating the Triune Brain*, in EDUCATION AND THE BRAIN, 308-342 (Jeanne S. Chall & Allan F. Mirsky, eds., 1978) (discussing the three parts of the brain – the "triune" brain – and how although it has expanded in size, the brain has retained the basic features that reflect human's descendency from reptiles, early mammals, and recent mammals).

⁴² *Id.*, see also RENATE NUMMELA CAINE & GEOFFREY CAINE, MAKING CONNECTIONS: TEACHING AND THE HUMAN BRAIN, 58 (1994).

⁴³ CAINE & CAINE, *supra*, note 42, at 59-61.

⁴⁴ *Id.* at 59.

⁴⁵ *Id.* at 62.

The limbic system is also involved with certain of our primal activities such as sense of smell, sex, nourishment and bonding between individuals.⁴⁶ It is capable of mediating our responses to external data through its ability to “read” and act upon our emotional responses, as well as overriding rational thought. Because the limbic system is involved in all of these activities, emotion is involved with virtually everything that we experience or do. For example, when incoming data indicates a problem, and the limbic system in concert with our rational/emotional brain structures, can discover no appropriate solution or problem solving process, anxiety, even fear, takes over, and the brain activates our fight-or-flight stress response.⁴⁷ The limbic system is powerful. “We tend to follow our emotions.”⁴⁸

Finally, the neocortex, the outer portion of the brain, does most of the processing of sensory data, and makes language, logical and formal thinking, and planning for the future possible. It is responsible for the creativity that we call science and art,⁴⁹ and is largely responsible for planning, analysis, sequencing, learning from errors, certain inhibitions to inappropriate behaviors and capacity for abstraction, including empathy.⁵⁰ Logical/rational thinking is centered in the neocortex.⁵¹

All three parts of the brain are in constant interaction. Although one segment may be predominantly “in charge” at a given moment, the others are not entirely out of the picture. This is especially true of the limbic system because it is engaged in activities which are also part of the function of the other two. For example, the limbic system’s receipt, and direction of incoming data, relates to the perception and analysis of external data by the neocortex, and is essential as a trigger for the response mechanism of the “reptilian” brain.

The challenge for legaleducators, is to help students learn so that, when faced with problems, whether intellectual, moral or both, they avoid resorting solely to the automatic, primitive, flight or fight response, but rather engage their neocortex with all of its power to process sensory data, draw broadly from memory, abstract, identify patterns, analyze rationally, and create new concepts, thus bringing to consciousness a broad range of potentially effective, ethical responses. In the following sections I will argue that the keys to the ability to learn so that learning is usable for effective problem solving and ethical lawyering are (a) the brain’s neural network system for recording implicit experience in memory and later recalling it, (b) the emotional power of the limbic system, and (c) their interaction.

⁴⁶ ROBERT SYLWESTER, A CELEBRATION OF NEURONS: AN EDUCATOR’S GUIDE TO THE HUMAN BRAIN, 43-44 (1995).

⁴⁷ *Id.* at 45.

⁴⁸ *Id.* at 44. *See also*, Jonathan Haidt, *The Emotional Dog and its Rational Tail: A Social Intuitionist Approach to Moral Judgment*, 108 *Psychological Review* 814 (2001) (arguing that moral judgment “is generally the result of quick, automatic evaluations”); Joshua D. Greene, et al., *An fMRI Investigation of Emotional Engagement in Moral Judgment*, 293 *SCI.* 2105 (2001) (arguing that based on their experiments, the degree to which emotion is engaged in influencing moral judgment varies with the kind of moral dilemma presented) *See discussion infra* pp. 15-16; THOMAS LEWIS, ET AL., A GENERAL THEORY OF LOVE, 112-118 (2001); *See also discussion infra* pp. 15-17 of LEE ROSS & RICHARD E. NISBETT, THE PERSON AND THE SITUATION: PERSPECTIVES OF SOCIAL PSYCHOLOGY (1991).

⁴⁹ CAINE & CAINE, *supra* note 42, at 63.

⁵⁰ *Id.* at 67.

⁵¹ *Id.*

B. CREATING MEMORY: CONNECTIVITY and our NEURAL NETWORK SYSTEM

1. *Encoding the Brain - The Process of Transforming Sensory Perception or Feeling into Memory*

In a very real sense, we are our memories because it is from our memories alone that we have a conception of who we are. We can have that conception only as it relates to the environment in which we exist.⁵² How our ongoing experience of the environment is recorded, stored, and recalled is what memory is all about. The stimulation of our sense organs and our emotions causes electrical impulses to be transmitted to nerves which connect the sense receptors to the brain, where they are encoded. Memory is the result of the process by which the electrical impulses caused by sense and emotional stimulation are recorded in the brain.⁵³ The physiological key to those processes are the neurons and their interactions with each other throughout the brain. “[T]he content of brain activity lies in the patterns of connections and activity among the neurons.”⁵⁴ Because we are always in some context and the brain is always receiving sensory signals and recording them, the brain is always learning and changing.⁵⁵

Our neural networks build on existing patterns.⁵⁶ When new data comes into memory, it seeks connections with similar content previously recorded.⁵⁷ The more we repeat experiences that create the same or similar patterns of neural connection, the stronger the pattern becomes, and the more likely we are to trigger its recall later.⁵⁸

This system of creating memory through the patterns of connections among neurons, and the tendency of repetition to strengthen the pattern and its likely recall, gives rise to several powerful tools, including the ability to correct errors in the perceived data, to conceptualize, and to create meaning from discordant data.

a. Error Correction

When I send an email to my wife at Temple Law School and inadvertently omit the “u” from the last segment of her address, the email invariably returns as undeliverable. If the process were run through my brain, however, it would recognize that I was aiming for “---temple.edu” - not “temple.ed”- and make the connection.⁵⁹

⁵² DANIEL L. SCHACTER, *SEARCHING FOR MEMORY: THE BRAIN, THE MIND, AND THE PAST*, 40-42 (1996).

⁵³ LEWIS ET AL., *supra* note 48, at 103; SYLWESTER, *supra* note 46, at 98-100; CAINE & CAINE, *supra* note 42, at 30-31; PINKER, *supra* note 40, at 25-26.

⁵⁴ PINKER, *supra* note 40, at 25.

⁵⁵ CAINE & CAINE, *supra* note 42, at 31.

⁵⁶ LEWIS ET AL., *supra* note 48, at 128-29; SCHACTER, *supra* note 52, at 61.

⁵⁷ PINKER, *supra* note 40, at 108-110. (pointing out that we learn from examples where learning consists of increasing the “weight” of the connections between and among the memories of related inputs, what he calls a “pattern associator.”)

⁵⁸ LEWIS ET AL., *supra* note 48, at 132-138. Ziva Kunda, *supra*, note 20, at 162-164. (“We often approach people and events with prior expectancies....Your expectancies may determine the very meaning you ascribe to ... behaviors as you observe them. Events that are congruent with our expectations may be particularly memorable not only because we pay greater attention to them, but also because they are more strongly related to our existing beliefs.” *Id.* at 164)

⁵⁹ *See id.* at 136-138 for a more detailed discussion of how the brain performs this operation.

b. Conceptualization

As the brain records similar patterns over time, the common elements of those patterns are strengthened, while the uncommon elements become weaker, and less likely to be recalled. The result is the extraction, or creation, of a pattern that represents the core set of connections, the prototype or underlying concept common to the various inputs.⁶⁰

c. Creating Meaning from Apparently Discordant Data

Frequently, there may be two possible interpretations from the same sense data. In such cases the brain is capable of comparing the input data to context and searching among similar patterns of neural connections in order to select the best “fit.” Steven Pinker gives the example of hearing someone say what sounds like “I am going to sinned a pin.”⁶¹ The brain could take those sounds and seek their meaning from memory exactly as they were heard. However, in the process of trying to locate a pattern that matched the sound and meaning it would likely find no match. Rather than merely reporting back “does not compute,” as it might if the words heard were in a language that the listener knew she didn’t understand, the brain will try to figure out what does make sense by finding a pattern of neural connections that best satisfies all of the ambiguities at once. If the listener’s memory has recorded that the speaker is one who speaks with a decided southern or southwestern accent and what that means her brain will determine whether that pattern fits both the sound and contextually meaningful interpretation. Even, however, if the listener does not know the speaker’s dialect, she knows that a single speaker uttered both of the “in” vowel sounds. Her memory tells her that at a given time a single speaker usually attaches the same vowel sound to the same vowel. Thus it is more likely than not that both of the sounds represent the same letter. Her brain will then try out the available vowels, a, e, o, and u, and discover that the only vowel that satisfies the constraints of being similarly sounded and making sense in the context is “e.” At that point, the listener’s memory will record that the speaker said, “I am going to send a pen.”⁶²

In Pinker’s example, the critical work of the brain was finding patterns in the memory that most closely matched the pattern coming from the sensory perceptions, knowledge of the speaker, and the meaning created by the context of what was said. That required the brain to remember not only the specifics, such as how different vowels sound, but also to store myriad facts about the way the world operates, such as that most people give the same vowel the same sound, native speaking people from the southeastern and southwestern states frequently speak with a particular dialect, and that the “e” and “i” sounds are frequently the same in that dialect. All of this data is in our memory even though we never consciously studied it, and the process operates far below our level of conscious awareness.

And it all happened below our consciousness and so quickly that we are not aware of the process.

⁶⁰*Id.* at 111, 128-32, 135, 136-38; PINKER, *supra* note 40, at 108-110.

⁶¹ PINKER, *supra* note 40, at 105.

⁶² *Id.* at 106.

In solving the problem of discordant data, the brain will, as we have seen, be substantially influenced by our expectations and needs.⁶³

2. Explicit and Implicit Memory

A. Explicit Memory

Certain memories, referred to as “explicit,” or “taxon,” memory, result from intentional learning. Because the material was explicitly studied as a unique focus of creating a memory of itself, rather than as part of a broader experiential context, its memory involves only a few of one’s senses and exists with minimal connection to other memories.⁶⁴ Learning the directions from point “A” to point “B” written out for you by a friend, or learning how to take apart and re-assemble your rifle, are done explicitly. Acquiring such memories usually requires repetition, and may also be assisted by observation of experts and continual feedback. Such memories include automatic skill sequences. Memorization of the multiplication tables, the steps to turn on my computer or car, touch typing, taking apart and re-assembling one’s rifle in the dark, and specific athletic skills are types of taxon memory. Memory acquired by explicit learning moves easily between memory and conscious activation. Taxon memories are thus valuable in survival situations because when triggered by the suggestion of danger, the skills and memories laid down in that system of memory can quickly be called into play, and we can expect the learned standard response even without conscious prompting.⁶⁵

B. Implicit Memory

In contrast, memory that develops from our participation in our environment and comes to us through a wider variety of sensory receptors is referred to as “implicit,” “locale” or “map” memory.⁶⁶ It is referred to as “locale” or “map,” because it embeds into memory not only the specific data to be “learned,” but also the context, or locale, in which we experienced it. It is “implicit” because it arises out of our participation in our environment, without regard to our conscious intention to remember it, and relates to ongoing aspects of our lives.⁶⁷ Since our engagement with our environment is continuous, it is related to, and builds upon, knowledge that already exists in memory.⁶⁸ Locale memory develops from the ongoing effort of the brain to create patterns and relationships and to create meaning.⁶⁹ It does not require repetition or memorization.

The neural network system for creating memory is constantly recording the context in which we move and experience life. Learning that takes place implicitly is recorded as part of the entire contextual pattern, and thus has multiple sensory inputs and myriad neural connections. Each

⁶³ See, ZIVA KUNDA, *supra*, note 20, at 162-164 (demonstrating how our emotional states of needs/desire/motivation, and expectation affect the memory we create from the data we perceive)

⁶⁴ CAINE & CAINE, *supra* note 42, at 42-44; See SCHACTER, *supra* note 52, at 170 for a demonstration of this with amnesic patients.

⁶⁵ SYLWESTER, *supra* note 46, at 95-96.

⁶⁶ CAINE & CAINE, *supra* note 42, at 44-47.

⁶⁷ *Id.* at 46; SYLWESTER, *supra* note 46 at 95-98; SCHACTER, *supra* note 52, at 42-45.

⁶⁸ SCHACTER, *supra* note 52, at 46; CAINE & CAINE, *supra* note 42, at 44-46.

⁶⁹ CAINE & CAINE, *supra* note 42, at 46.

new pattern of connections contributes to the brain's memory of the event.⁷⁰ Therefore, the more perceptual and emotional inputs that create the neural pattern for a memory, the more connections are created among the neurons. The more points of connection in a pattern of memory, the more likely that a particular stimulus will bring it to recall.⁷¹

At the same time, however, implicit memory has its limitations. For example, the automatic error correction makes it very difficult for us to proof read our own writing, because our brains have, over time, developed strong patterns for perceiving and understanding the correct spellings, and, upon seeing a slightly incorrect one are likely to recall what we are actually seeing as the correct version.⁷² We bring to every problem a host of intuitions, beliefs and assumptions. These are concepts that we have built on implicit memory accumulated over the years, and we seldom, if ever, reconsider them without some strong external impetus. When the patterns of memory we draw on to create meaning from discordant data are implicit memory we are not conscious of the analytical work that our brains are doing. Our tendency to establish meanings, to draw conclusions, i.e., to conceptualize, from implicit memory, and thereafter to make judgments based on those concepts leads us to act without the application of critical judgment.⁷³

"Implicit memory warps our window on the world."⁷⁴ "While *explicit memory* serves itself up for conscious reflection, *implicit memory* does not. That is why it escapes our notice."⁷⁵ "[We] acquire wonderfully complicated knowledge that we cannot describe, explain, or recognize."⁷⁶ "The brain never permits naked reality to intrude into consciousness; all inbound sensory impressions pass through a process that sands the rough edges off an inhospitably complex universe."⁷⁷ "All experience comes to us through similar layers of invisible and occasionally dubious deductions. ... Our internal realities are mock-ups of unparalleled persuasive power."⁷⁸ "Behind the bright, analytic engine of consciousness is a shadow of silent strength, spinning dazzlingly complicated life into automatic actions, convictions without intellect, and hunches whose reasons follow later or not at all."⁷⁹ Implicit memory has been shown, for example, to contribute to gender and racial biases that people are unaware that they possess.⁸⁰

The environment in which law students are immersed is rich with reading and interpreting statutes and court decisions, analyzing text, considering the phrasing of an appropriate rule of law, and arguing for its adoption against professors and colleagues. Students are constantly

⁷⁰ SCHACTER, *supra* note 52, at 58-59.

⁷¹ *Id.* at 42-46, 71. See also CAINE & CAINE, *supra* note 42, at 48-49.

⁷² LEWIS ET AL., *supra* note 48, at 138-39.

⁷³ SCHACTER, *supra* note 52, at 170-171.

⁷⁴ LEWIS ET. AL., *supra* note 48, at 118.

⁷⁵ *Id.* at 107.

⁷⁶ *Id.*

⁷⁷ *Id.* at 118-119.

⁷⁸ *Id.* at 119.

⁷⁹ *Id.* at 112. See also, Haidt, *supra* note 47; ROSS & NISBETT, *supra* note 48.

⁸⁰ SCHACTER, *supra* note 52, at 189-90. Geoffrey Hazard's concern that the failure to teach ethics throughout the law school curriculum sends the implicit message is not a problem, HAZARD, PAYING ATTENTION TO THE SIGNS, *supra*, note 37, and Howard Lesnick's concern that the selection of subject matter in law school courses teaches a powerful implicit lesson that the matters not included are unimportant. Howard Lesnick, *Infinity In A Grain Of Sand: The World Of Lawyering As Portrayed In The Clinical Teaching Implicit In Law School*, 37 UCLA L. REV. 1157 (1990), are but two examples of concern voiced by leading legal academics for the powerful and potentially pernicious effect of implicit learning.

engaged in analyzing the same type of material, deciding what the legal rule should be, and zealously advocating in favor of its application.⁸¹ Socratic dialog in our classes is emotionally

⁸¹ In each law school course, students analyze appellate opinions using substantially the same tools and methods.

charged, as students are challenged to come up with arguments facing their professors, surrounded by their peers. By implicit learning, i.e., by doing, and being critiqued, rather than by intentionally studying the process, and by repetition, students working in that atmosphere learn principles and processes of analysis of statutes, regulations, and court opinions and how to build an argument in support of the client's position. Their neural networks form patterns of implicit memory that are repeatedly reinforced, to follow or distinguish precedent whenever they must analyze legal problems. Because they work primarily from appellate opinions, they are "programmed" to look to predetermined sources, e.g., the findings of the court below, the appellate court's identification of the relevant facts, or the professor's hypothetical, for all of the relevant facts. In addition, the emotion of both the Socratic dialogue in class and exams have reinforced those implicit memories. They may forget most of the particular legal doctrines learned in various substantive courses; however, forever after, whenever their senses perceive a problem as a legal problem, their brains will call on the patterns of neural connections – the memories – that were created implicitly in law school, about how to respond. Noticeable absent from the explicit teaching, except in the course on ethics, is any consideration of values.

When the legal problem is instrumentalist – how to accomplish our client's goal - the explicit and implicit knowledge garnered in law school about how to solve legal problems stands our students, as lawyers, in good stead, because the answer involves making an effective argument for the applicability of a legal rule to achieve that goal. The difference between the particular raw material presented by the client in "real life," and the "hypos" faced in law school, are not terribly problematic, because the concepts and analytical skills that were so effectively encoded in memory en route to the J.D. are readily transferable to most legal domains. Drawing on those memories will, generally, produce valuable information for solving instrumentalist legal problems. However, when the problem is not "*how to do something*," but rather *whether to do it*, when it involves values or relationships among people – which much of a lawyer's work does – neither the explicit, nor the implicit knowledge learned in law school is of much help. Among the factors that the rule based examination of the problem does not consider are the future relationships between and among the parties, the values of the relevant players, including the lawyer and the potential impact on third parties. Relationships and values, however, implicate emotion as much, or more, than cognitive analysis.

3. The importance of Emotion in Creating Memory

*We don't see things as they are. We see things as we are.*⁸²

"[E]motionally important contexts can create powerful memories."⁸³ The brain registers events as pleasurable or painful, exciting or soothing.⁸⁴ Story and context relating to our experience

⁸² I have repeatedly seen this quite attributed to Anais Nin, and on occasion to the Talmud, but never with any specific location or text.

⁸³ SYLWESTER, *supra* note 46, at 96; See also Schacter, *supra* note 52, at 201, 209 (noting the power of memories concerning personal trauma): Caine & Caine, *supra* note 42, at 45-47 (discussing how emotions influence map formation within the brain).

⁸⁴ Pinker, *supra* note 40, at 139.

necessarily involve emotion. While some particular emotional “highs” or “lows” are explicitly recorded in memory, most emotional learning is implicit.⁸⁵ All of our experiences involve our emotions. Thus our emotions are a critical part of the neural patterns that comprise the memory of any event. Indeed, some researchers have argued that there can be no memory without emotional content.⁸⁶

Emotion drives attention,⁸⁷ and to the extent that attention to the experience is an aid in creating memory, emotion is a major contributing factor. That which is meaningful to the rememberer will be more readily remembered than what is not.⁸⁸

Our state of mind at the time that we experience events affects what we remember. Expectations⁸⁹ and motivation⁹⁰ are particularly important factors in determining what we store in memory.

Expectations can arise from many sources, such as prior experiences, information given by another person, stereotypes, etc. One example is found in a study in which two groups of individuals were shown a video of a husband and wife interacting together. Some of the observers were told that the woman was a librarian, and some were told that she was a waitress. Some of the activities and attributes of the woman were consistent with stereotypes of waitresses (e.g., drinks beer, affectionate with husband), and some with those of librarians. (E.g., wears glasses, listens to classical music) When the observers were questioned after viewing the video, they recalled the attributes consistent with the stereotype of the person that they brought to their observation, while not recalling the attributes that were more similar to the other.⁹¹

⁸⁵ LEWIS ET AL., *supra* note 47, at 116.

⁸⁶ CAINE & CAINE, *supra* note 42, at 63-64; *See also* C. Holden, *Paul Mac Lean and the Triune Brain*, 204 SCI. 1066, 1069 observing that “[a]ccording to Mac Lean, subjectively ‘something doesn’t exist unless it’s tied up with an emotion’.”

⁸⁷ SYLWESTER, *supra* note 46, at 72. At the same time, however, as discussed below at pp 20-21, powerful, negative emotion may cause the brain to narrow its focus and thus not give attention to relevant stimuli in the environment.

⁸⁸ SCHACTER, *supra* note 52, at 44-45. But see, discussion of “downshifting,” pp. 22-23, *infra*.

⁸⁹ *See*, ZIVA KUNDA, *supra*, note 20, at 162 (“Your expectations may determine the very meaning you ascribe to [events as] you observe them, especially if they are ambiguous and can be understood in more than one way.... Even when events have clear meaning and are not open to multiple construals, our expectations can still influence our meaning by directing the amount of attention we devote to different aspects of reality as we observe it, and by determining how new information is linked to existing knowledge”).

⁹⁰ *Id.* at 168-170. (Motivation affects the nature and amount of attention we pay to what we perceive. “The way we process an even event and its resulting memorability are also affected by the personal significance the event carries for us”); *Id.* at 170

⁹¹ *See*, ZIVA KUNDA, *supra*, note 20, at 164.

An example of a study that demonstrates the power of motivation in affecting our perceptions involved second year students at a religious seminary who were told that they had to give a practice sermon on the topic of “The Good Samaritan.” Immediately before the time scheduled for their assignment they were required to be across the campus from the location at which they were to deliver their sermon. Half of the students were told that they had plenty of time to get across the campus and still be on time, while the other half were told that they were running late, and needed to hurry in order to get to their assigned location on time. Along the way, each passed by a person slumped in a doorway, looking disheveled. Overwhelmingly, those that thought that they had plenty of time, stopped to see if they could help the person, while those who thought that they were late, did not. Later, when questioned about what they had seen, those that felt that they had adequate time, described the person as appearing to be in distress; while those that thought that they were running late, and did not stop, described the person in terms of appearing to be drunk, or on drugs.⁹²

4. The Importance of Childhood Value Development in Adult Moral Reasoning.

In “The Emotional Dog and its Rational Tail,” Jonathan Haidt argues that just as all of us are born with the neural tools to learn language, we are also born with the neural “tools” to develop moral intuitions and values, and that during our lives we are immersed in the “beliefs, values, sanctions, rules, motives and satisfactions” of our particular community.⁹³ Even without explicit “lessons” in morals and customs, we pay close attention to what we perceive them to be in our families, peer groups, etc., learning them implicitly, because failure to abide by them will have serious adverse consequences to us. Peer socialization, more than parental “teaching” contributes to the shaping of these moral intuitions.⁹⁴ He points out that there is strong evidence that the brain’s “hard wiring” for these abilities in the prefrontal cortex, and thus the foundational “memory” of our moral values, occurs during late childhood through adolescence.⁹⁵

Haidt’s basic analysis is not new. For example, Lawrence Kohlberg,⁹⁶ and Carol Gilligan⁹⁷ while disagreeing about the nature and extent of the development of values and moral reasoning nevertheless agree that the process begins in childhood with implicit learning from the people closest to us. And Robert Coles demonstrates conclusively that moral development is certainly

⁹² See Ross and Nisbett, *supra*, note 48, at ____.

⁹³ Haidt, *supra* note 47, at 827, quoting J. W. M. WHITING & IRVIN L. CHILD, CHILD TRAINING AND PERSONALITY: A CROSS CULTURAL STUDY 27 (1953). See also, John Dewey, *Experience & Education*, The Kappa Delta Pi Lecture Series, 48 (1938, Touchstone ed. 1997) (“Perhaps the greatest of all pedagogical fallacies is the notion that a person learns only the particular he is studying at the time. Collateral learning in the way of formation of enduring attitudes, of likes and dislikes, may be and often is much more important than the spelling, or geography or history lesson that is learned. For these attitudes are fundamentally what count in the future.”)

⁹⁴ *Id.* at 828.

⁹⁵ *Id.* at 827-828.

⁹⁶ Lawrence Kohlberg, “Stages and Sequence, The Cognitive-Developmental Approach to Socialization”, 347, 365-368; in D.A. Goslin, ed., HANDBOOK OF SOCIALIZATION THEORY and RESEARCH (Chicago, Rand McNally, 1969)

⁹⁷ Knol Gilligan, IN A DIFFERENT VOICE: Psychological Theory of Women’s Development, Ch. 2 at 24-63 (Harvard University Press, Cambridge 1982)

an active process in children from a very young age.⁹⁸ Thus, we arrive at adulthood with implicitly learned, socially constructed “intuitions” concerning most aspects of moral values which form the basis of our adult moral reasoning – the “Social Intuitionist” model of moral reasoning.⁹⁹

C. RESPONDING RESPONSIBLY AS LAWYERS: USING the TOOLS WE HAVE STORED IN MEMORY

The myriad patterns of neural connections that make up our memory, and to which we are constantly adding, thankfully remain dormant until some stimulus or cue calls them to our consciousness. Our challenge is to make the greatest use of our explicit and implicit memories and the creative power of our neo-cortex, to solve the difficult problems that challenge us to act in an ethically and professionally responsible way, while appropriately serving our clients.

1. The Power of Emotion in Problem Solving

a. The Power of Implicit Emotional Memory

In *The Person and the Situation*,¹⁰⁰ Lee Ross and Richard E. Nisbett collected the results of more than a dozen studies extending over more than 20 years by a wide array of researchers, to demonstrate that individuals make critical moral and personal decisions based on their emotional reaction to factors that appear to be inherent in the situation facing them, rather than on the individual’s previously demonstrated moral and analytical qualities.¹⁰¹ The vast disparity between actual and expected behavior strongly suggests that factors other than moral values and analytical ability are driving the individuals’ decisions.

Recent work, by researchers at Princeton University and the University of Pittsburgh¹⁰² and by Jonathan Haidt at the University of Virginia,¹⁰³ support the proposition that emotions may be even more powerful than reasoning in making such decisions. In addition, Psychiatrists Lewis, Amini, and Lannon, have drawn a similar conclusion from their own clinical experiences and a review of much of the research in the area.¹⁰⁴ Cognitive psychologists refer to this process as “hot cognition,” that is mental processes that appear to be the result of our cognitive, analytical,

⁹⁸ Robert Coles, *supra*, note 15. (Coles, a child psychiatrist, describes his work with, and observations of, children, in the 1960s and 1970s in the American South, Brazil and South Africa.)

⁹⁹ Even those who take issue with the power of Haidt’s social intuitionist model of moral decision making in adulthood, and the ability of learned cognitive behavior to overcome our “social intuitions,” agree that the process of developing the powerful, deeply imbedded values which form the foundation for our moral reasoning as adults proceeds through implicit childhood and adolescent learning. *See, e.g.*, D.A. Pizarro and P., *The Intelligence of the Moral Intuitions: A Reply to Haidt*, 110 PSYCHOL. REV. 193 (2003). Haidt, however counters by arguing that while the cognitive processes identified by Pizarro and Bloom can be deployed, they very seldom are; leaving our social intuitions to control our moral decision making. Jonathan Haidt, *The Emotional Dog Does Learn New Tricks: A Reply to Pizarro and Bloom*, 110 PSYCHOL. REV. 197 (2003).

¹⁰⁰ ROSS & NISBETT, *supra* note 48.

¹⁰¹ *Id.*

¹⁰² Greene, et al., *supra* note 48.

¹⁰³ Haidt, *supra* note 48.

¹⁰⁴ *See* LEWIS ET AL., *supra* note 48, at 106-120. (demonstrating how patients with implicit memory brain damage can still learn, but lose incremental acquisition of intuitive knowledge).

processes, but are, in fact, driven by our desires and feelings.¹⁰⁵ Moreover, there is now a broad consensus that the impact of past experiences, even those of which we were never conscious, or once were conscious but not longer are, and, in any event, have no present realization of their influence, have great power in directing our present judgments, feelings, and behaviors.¹⁰⁶ “We may automatically infer people’s character from their behavior, automatically experience affective reactions to a variety of objects, automatically behave in line with traits cued by recent experiences, and automatically engage in a variety of other mental processes as well.”¹⁰⁷ Importantly, we are unaware of the operation of this process.

Researchers at Princeton University and the University of Pittsburgh, performed functional Magnetic Resonance Imaging (fMRI) studies on subjects given three different problems to solve: one with no moral dilemmas and two with the moral dilemma of whether it is morally acceptable to affect the death of one person in order to save five.¹⁰⁸ The latter two were what are known as the “trolley dilemma:” a trolley is proceeding out of control down a track towards five people who will certainly be killed if the trolley is not stopped or derailed, but to stop or derail the trolley will necessarily cause the death of one person.¹⁰⁹

In the first of the two trolley situations, the subject is asked if he would throw the switch to shift the trolley to another track which would necessarily lead to the killing of one person who is standing on that track. In the second situation, referred to as the “footbridge dilemma,” there is no switch; however, there is a very large man standing at the edge of the footbridge, under which the runaway trolley will pass before striking and killing the five victims. If the subject pushes the man off the bridge into the path of the oncoming trolley, the man will be killed, but the impact will derail the trolley, saving the lives of the five persons who would have otherwise been killed. The subject is asked whether he would push the man.

Overwhelmingly, subjects said that they would throw the switch in the first case, but not push the man in the second.¹¹⁰ When asked to explain why, they were not able to do so based on any logical reasoning.¹¹¹ Rather, it “felt” or seemed different. During the experiment, the fMRI recorded very different brain activity in the two trolley situations. The brain activity during “the switch” was much closer to that when the subject was considering the non-moral problem than it was to the brain acting on the “footbridge” version. The difference was seen as the actor’s emotional connection with the act of actually pushing another to his death, as compared with the more impersonal, and thus less emotional, act of causing his death through the use of an intervening force, the trolley switch.¹¹² Clearly, these responses demonstrate the “automatic processes” described by Kunda.¹¹³

¹⁰⁵ ZIVA KUNDA, *supra*, note 20, at 211. (“Both motivation and affect may influence which concepts, beliefs, and rules we apply to judgment; we may be especially likely to apply those that are congruent with our goals and moods. Motivation may also influence our mode of processing information, determining whether we rely on quick and easy inferential shortcuts, or rely on elaborate systematic reasoning.”)

¹⁰⁶ *Id.*, at 265- 288.

¹⁰⁷ *Id.* at 303.

¹⁰⁸ Greene et al., *supra* note 48, at 2105.

¹⁰⁹ *See id.*

¹¹⁰ *Id.*

¹¹¹ *Id.* at 2106.

¹¹² Greene et al., *supra* note 47, at 2105-2108.

¹¹³ See note 101, and accompanying text, *supra*.

“Intuitions within culturally supported ethics become sharper and more chronically accessible, whereas intuitions within unsupported ethics become weaker and less accessible.”¹¹⁴ Haidt does not deny that moral thinking and reasoning, and reflective judgment, can be taught, nor that once taught, they have no impact on one’s moral judgments and action. Rather, he points to earlier demonstrations that “attempts to directly teach thinking and reasoning in a classroom setting generally show little transfer to activities outside the classroom, and because moral judgment involves [more highly emotionally charged] topics than are usually dealt with in courses that attempt to teach thinking and reasoning, the degree of transfer is likely to be even smaller.”¹¹⁵ Haidt’s argument is supported by subsequent work done by Joshua Greene and Haidt which concluded, “Neuroimaging studies of moral judgment in normal adults, as well as studies of individuals exhibiting aberrant behavior, all point to the conclusion, embraced by the social intuitionist model, that emotion is a significant driving force in moral judgment. ... These results also suggest that much, although not necessarily all, moral judgment makes use of processes [in the brain] specifically dedicated to social cognition and, more specifically, the representation of others’ mental states.”¹¹⁶

d. Avoiding the Danger of “Downshifting”

Making choices and exercising judgment produce stress. Making morally charged choices, or choices in situations where one feels personally threatened, produces a high level of stress. The more stressed we are the less likely we are to engage our cognitive processes, and the more likely we are to rely, unthinkingly, on our expectations, desires, and other emotion laden memories.¹¹⁷ Stress produces physical and psychological reactions within our body.¹¹⁸ Among our reactions to stress is the release of several hormones in the brain, including adrenaline, noradrenalin and cortisol.¹¹⁹ Increases in adrenaline and noradrenalin in the brain are generally associated with stress perceived as a challenge which we have the ability to meet, rather than as a threat. It can strengthen us to handle the challenge.¹²⁰ Such stress is not particularly harmful to the body.¹²¹

However, under conditions of persistent or unreasonably high stress, the body secretes excessive amounts of cortisol.¹²² High levels of cortisol inhibit cognitive functioning, and can lead to the inability to distinguish between important and unimportant elements of an experience, or to feelings of despair.¹²³ Thus, constant or unreasonably high levels of stress can have very negative

¹¹⁴ Haidt, *supra* note 48, at 827.

¹¹⁵ *Id.* at 829.

¹¹⁶ JOSHUA GREENE AND JONATHAN HAIDT, HOW (AND WHERE) DOES MORAL JUDGMENT WORK? SIX TRENDS IN COGNITIVE SCIENCE, 517,522 (2002).

¹¹⁷ ZIVA KUNDA, *supra*, note 20, at 167.

¹¹⁸ CAINE & CAINE, *supra* note 42, at 70.

¹¹⁹ *Id.* at 71.

¹²⁰ *Id.* at 72.

¹²¹ *Id.* at 70.

¹²² *Id.* at 71.

¹²³ SYLWESTER, *supra* note 46, at 38 (“Chronic high cortisol levels can lead to the destruction of neurons in the hippocampus associated with learning and memory. Even the short term stress-related elevation of cortisol in the

effects on learning.¹²⁴ They can impede our capacity to perceive patterns and form memories.¹²⁵ When our brains perceive a situation as threatening and do not feel able to resolve it satisfactorily, we do what some psychologists have called “downshifting,” to focus on the perceived threat.¹²⁶ When we “downshift” we narrow our focus and limit the incoming stimuli which we consider in order to engage our more primitive self protective response mechanism.¹²⁷

In such situations, the brain is also less able to engage in open ended thinking and connect the perceived experience with the full array of neural connections that might otherwise be available to us to formulate a response. Rather than engage the neocortical brain with its power to abstract, analogize, consider broader and more subtle external and internal cues, and develop new connections and responses necessary for resolving the threatening situation, we get “stuck.” At that point, the brain’s problem solving mechanism may shut down, We feel helpless, fatigued, even a sense of despair, and are unable to distinguish between important and unimportant elements in the environment, or to access our open-ended reasoning power. Our brain resorts to recall primarily from its more primitive, survival oriented reptilian and limbic systems.¹²⁸ Responding through those systems leaves us with limited tools: the “relentless unreasoning force” of implicit emotional memory with which to understand the situation,¹²⁹ “automatic actions, convictions without intellect, and hunches whose reasons follow later or not at all”¹³⁰ and fight or flight as our arsenal of responses. We become defensive, even phobic, and tend to act precipitously. “When we downshift, we revert to the tried and true, and follow old beliefs and behaviors regardless of what information the road signs provide.”¹³¹

In the face of a threatening situation, the critical factor in determining whether we “downshift,” limiting our intake of data and the range of our responses, or instead open ourselves to expand our data intake and deploy the powerful analytical tools of the neo-cortex, appears to be “whether we see a solution to [the] problem or perceive ourselves as capable of resolving it.”¹³²

But, these automatic responses that result from emotionally weighted, implicitly learned social intuitions, can be avoided. For one thing, if we have sufficient time to reflect on the situation, our emotional response to it, and the consequences of various possible courses of action, we can override the effects of automatic reactions.¹³³ In addition, when our emotions inform us that we

hippocampus can lead to the inability to distinguish between the important and the unimportant elements of a memorable event.”); SCHACTER, *supra* note 52, at 243-244.

¹²⁴ SCHACTER, *supra* note 52, at 243-44 (“A series of important studies by Joseph LeDoux and his colleagues has shown that this impairment [problem learning and remembering fear] can be produced by damaging a single structure within the amygdala, known as the lateral nucleus.”).

¹²⁵ CAINE & CAINE, *supra* note 42, at 71.

¹²⁶ *Id.* at 69-70.

¹²⁷ *Id.*; See also, SCHACTER, *supra* note 52, at 242-244 for a discussion of how a prolonged stressful environment can have deleterious effects on the brain and cause neuron loss.

¹²⁸ SYLWESTER, *supra* note 46 AT 38; CAINE & CAINE, *supra* note 42, AT 73, 76-7; SCHACTER, *supra* note 52, at 242-244.

¹²⁹ LEWIS ET AL., *supra* note 48, at 118.

¹³⁰ *Id.* at 112.

¹³¹ *Id.* at 70. For a further discussion of emotion, learning, and downshifting see SYLWESTER, *supra* note 46, at 45 and 73; CAINE & CAINE, *supra* note 42, at 69-70; and discussion *supra* pp. 17-18.

¹³² CAINE & CAINE, *supra* note 42 at 72.

¹³³ ZIVA KUNDA, *supra*, note 20, at 289.

care about making the right decision, the emotional force of that motivation can overcome the tendency to act automatically.¹³⁴

2. How Experts Do It

“Experts” are people who can understand and solve problems that others – non-experts – cannot. Thus, it might be valuable in trying to ascertain how to go about learning to solve complex ethical problems to examine what it is about “expertise” that enables experts, generically, to do so.

As described by Gary L. Blasi¹³⁵ and Donald A. Schön,¹³⁶ experts seem to be able to leapfrog over several levels of detailed analysis to identify and engage patterns of apparently related information directly to a given problem, and also to matters that are facially different, yet analogous, and thus useful for the solution. Their memories include a combination of a deep body of subject matter data, and “experience,” the accumulated knowledge from actually using the data in various situations over time (i.e., in context). Accessing these memories permits them to compare and contrast the characteristics of the presenting problem with those of the many problems with which they have engaged in the past. Schön’s describes this as engaging in a “reflective conversation with a unique and uncertain situation.”¹³⁷ This process enables the experts to construct patterns, or “mental models” that permit them to move forward towards a solution.¹³⁸

Critical to the experts’ approach to a problem are the following: (1) a deep foundation of factual knowledge in the domain; (2) experience, i.e., working with the data in context; and (3) understanding of the conceptual framework that relates to the domain. Given these attributes, experts can see patterns in the data that might not be obvious to others and thus recognize when a “given” problem actually has critical unidentified attributes – perhaps even a different foundational problem - that affect achievement of the desired goal.¹³⁹

How is such expertise developed?

a. Elaborately Encoded, Implicit Memory

Explicit or taxon, memory created by intentional studying of relevant material is one factor. But, experts’ knowledge cannot be reduced to a fund of explicitly learned data. Rather, it is implicitly learned, contextualized, and organized around core concepts.¹⁴⁰ For the professionals whose

¹³⁴ *Id.* at 305.

¹³⁵ Blasi, *supra* note 28.

¹³⁶ DONALD A. SCHÖN, *THE REFLECTIVE PRACTITIONER: HOW PROFESSIONALS THINK IN ACTION* (1983).

¹³⁷ *Id.* at 130 (The expert responds to a situation in action based upon her education, training and experience in using that knowledge in context. That action produces consequences which may include unexpected ones (i.e., the situation “talks back” to the expert), and the expert responds to that “back-talk.” The expert uses this process to build towards a solution.)

¹³⁸ Blasi, *supra* note 28, at 335-336, 344; SCHÖN, *supra* note 132, at 268-69; *See also*, *HOW PEOPLE LEARN: BRAIN, MIND, EXPERIENCE AND SCHOOL*, 31-33 (John D. Bransford, et. al eds., 2000).

¹³⁹ *HOW PEOPLE LEARN*, *supra* note 134, at 45-47 (The “virtuoso” or expert with adaptive expertise, treats the client’s articulation of the problem with respect, but also as a point of departure for further exploration.)

¹⁴⁰ *Id.* at 13, 36-8, 48.

work was examined by Schön, all of the problems presented challenges that they had not directly encountered before. However, they were able to engage with the problem in context, and find concepts from their experience that contributed to developing a solution. In so doing, they continually re-examined and reflected on their understanding of the problem, as well as the appropriateness of their approach to solving it,¹⁴¹ each time elaborately encoding new patterns of neural connections that reinforced the core relationships among the data. Without a vast store of elaborately encoded, implicit knowledge, such an approach would not have been possible. The creation of implicit memory by repeated elaborate encodings from different, yet similar contexts not only enhances the internal bond of the patterns of neural connections, but also highlights the core similarities among related neural patterns, thus strengthening the connections among those representing the concepts central to the memory.¹⁴²

b. Adaptive Expertise and Metacognition

Some experts simply possess large funds of domain knowledge but are unable to apply it to matters outside of those areas. Chess masters, for example, have been shown to have a keen ability to remember the placement of pieces on the board far better than they can remember similar non-chess related patterns.¹⁴³ Other experts, such as those studied by Schön, are able to adapt their knowledge to the demands of new and different external situations. They are said to have “adaptive expertise.”¹⁴⁴

Experts with adaptive expertise see the presenting problem as the starting point for exploration, an exploration that may lead to a reconfiguration of the problem, itself, as well as the development of a path leading to an effective solution.¹⁴⁵ Key to the difference between experts with and without adaptive expertise is metacognition. Metacognition refers to the ability to understand one’s own thought processes,¹⁴⁶ including the nature, scope and limitations on one’s knowledge,, and the willingness to seek to overcome the limitations by seeking out new sources of relevant expertise.¹⁴⁷ To avoid such automatic responses as downshifting, but instead employ the best of one’s analytical and problem solving skills, including an objective evaluation of one’s

¹⁴¹ SCHÖN, *supra* note 136, at 54-56 (examples of major league baseball pitcher, and experienced jazz musician, both of whom must examine their performance as it relates to the performance of others, and evaluate and adjust as they are performing), and 128-36 (reviewing the preceding discussion of that same process by architects and psychotherapists).

¹⁴² See discussion “Implicit Memory,” *supra* pp. 14-17; SCHACTER, *supra* note 52 at 56, 60, 63. (recall of explicitly learned memory depends upon the similarity between the encoding process and the recall cue; while elaborately encoded, or implicit, memory, being susceptible to recall by myriad cues, has a much higher likelihood of being recalled). Another example of the critical value of contextualized learning is that actors don’t simply memorize lines, but rather seek to understand the person they are portraying, and the emotional environment and impact on that person of the situation in which they find themselves. SCHACTER, *supra* note 52, at 49. Pinker further explains that access to long term memory – “access consciousness” – is a function of the “richness of present-tense [i.e., sensory] awareness” attention and emotion at the time of the experience, and relevance at the time of need for recall. Pinker, *supra* note 40, at 138-45

¹⁴³ Blasi, *supra* note 28, at 335; SCHACTER, *supra* note 52, at 48-49.

¹⁴⁴ HOW PEOPLE LEARN, *supra* note 134, at 46-48.

¹⁴⁵ *Id.* at 32

¹⁴⁶ SYLWESTER, *supra* note 46, at 85.

¹⁴⁷ HOW PEOPLE LEARN, *supra* note 134 at 12-13.

own resources, as well as their limitations, and then seek out other resources necessary create an effective solution requires motivation, competence and confidence.¹⁴⁸

3. IMPLICATIONS FOR TEACHING PROFESSIONAL RESPONSIBILITY IN LAW SCHOOL.

As we have seen, most of our moral choices are initiated automatically, before our cognitive processes can be engaged, by values, social intuitions, expectations, and needs which we developed over many years of daily living and implicit, emotionally rich learning. They are in place before students arrive at law school. Moreover, the more stress we experience when confronted by a moral or ethical dilemma, the more likely we are to simply rely on those emotional memories, and the less likely we are to engage our cognitive resources. The lawyers in the problems at the beginning of this paper probably studied the rules of professional responsibility, yet they were unable to overcome the pressures of the situations in which they found themselves, even to the point of considering the ethical issues, and developing an appropriate problem solving strategy. Nevertheless, while our mental-emotional edifice, constructed over many years, is powerful, our pre-adult experiences are not necessarily our destiny.¹⁴⁹ But it is not easy to change. Simply studying and learning moral reasoning won't do it.

After childhood, "emotional learning doesn't stop, but it slows. ... [O]ften the only emotional learning one sees after childhood is the reinforcement of existing fundamentals."¹⁵⁰ They suggest that three to five years, sometimes more of therapy is usually required to make significant change in adults' emotional responses.¹⁵¹ Haidt suggests "[y]ears of. . . implicit learning, coupled with explicit discussion, should gradually tune up intuitions. . . about justice, rights, and fairness, leading perhaps to an automatic tendency to look at problems from multiple perspectives. ..." ¹⁵² But he ventures no guess as to how long that might take.

The legal education described by Friedland's survey results¹⁵³ and familiar to all of us does not seem likely to serve those goals. Worse yet, it may, as I think the examples at the beginning of this article demonstrate, be antithetical to them.

For most law students, their exposure to matters of professional responsibility is limited to taking one course in the subject, and in preparing for and taking the Multi State Professional Responsibility Examination (MPRE).¹⁵⁴ Although the American Bar Association has, since

¹⁴⁸ ZIVA KUNDA, *supra*, note 20, at 211-216 (demonstrating the importance of motivation in exercising judgment); HOW PEOPLE LEARN, *supra*, note 138, at 48.

¹⁴⁹ *Id.* at 829; LEWIS ET AL., *supra* note 48, at 169-190 (discussing the process by which psychotherapy helps individuals re-order their implicitly learned emotional memories); ZIVA KUNDA, *supra*, note 20, at 289, 305.

¹⁵⁰ LEWIS ET AL., *supra* note 48, at 163.

¹⁵¹ *Id.* at 187.

¹⁵² Haidt, *supra* note 48, at 829; *See also*, Eleanor W. Myers, *Simple Truths about Moral Education*, 45 AM. U. L. REV. 823, 835-36 (1996); Myers, *supra* note 35, at 409-10, 414, 416-17.

¹⁵³ Friedland, *supra* note 29, at 19-23, 27-30.

¹⁵⁴ The career plans of our students do not incentivize them to pay particular attention to issues of ethics and professional responsibility. In the more than 10 years that I have been teaching, during all of which time I have served on my law school's Career Planning and Placement Committee, and indeed in the 25 years that I practiced

1974, required as a condition of accreditation that a law school require each of its graduates to complete a course in professional responsibility,¹⁵⁵ there is little incentive for students to really “dig into” the subject, even at the rule based level.¹⁵⁶

To the extent that the course is taught in a manner similar to that used in other subject matter courses, the emotional experience of the students is minimal.¹⁵⁷ Certainly, there is always some emotional connection when one is called upon in class, and with final exams. Yet, in class, and when the exam is comprised of the standard essay and/or multiple choice questions, the student is required to identify and apply the rule of professional conduct implicated in a given fact pattern. The emotional connection is with knowing and applying the correct rule in a situation in which the student knows, in advance, that the fact pattern raises one or more ethical questions. Student’s emotional engagement is not with seeking to discover and understand the full context, identifying and creating options, discerning the ethical choice, and acting on it by exercising judgment to decide what to do, and communicating that judgment to a client and/or supervisor who might prefer a different response, knowing that she may face adverse consequences from her choices. Rather, the only thing at risk is the student’s grade in a course she may see as having little impact on her future.

Legal problems encountered throughout the law school curriculum, outside of Professional Responsibility class, are generally taken from the instrumentalist perspective, and do not consider matters of professional responsibility, i.e., they ask only *how to* do something. Matters of professional responsibility are, inherently, normative, i.e., asking *whether to* do something. Thus, to the extent that our students carry memories of issues relevant to ethical decision making, they are primarily explicitly learned, “taxon” memories of specific rules learned in their one class on ethics and professional responsibility.¹⁵⁸

before that, I have heard of only one law firm, during one hiring season, that considered an applicants’ responses to questions of professional responsibility during the hiring process, or paid particular attention to the applicant’s grade in that course.

¹⁵⁵ ABA Standard 302(a) (iv), Standards for Approval of Law Schools.

¹⁵⁶ Law schools have not rushed to adopt Professor Rhode’s proposed “pervasive method” for educating law students about professional responsibility by including some problem set and important class time for discussion of professional responsibility issues throughout the curriculum. Rhode, *supra* note 16, at 4-5. Rather, professional responsibility is generally a two credit course offered to second and third year students, frequently after they have taken and passed, with the aid of a bar review course, the MPRE.

¹⁵⁷ For a discussion of Friedland’s findings see *supra*, note 29.

¹⁵⁸ Of course, there have been numerous creative and potentially effective efforts by talented and dedicated teachers of professional responsibility to design and teach professional responsibility within a pedagogic framework that do exactly what Haidt, Bransford, Brown, and Cocking, Caine & Caine, Schoen, Blasi, and Myers, suggest, including engaging the students in the process of exercising judgment in multiple contexts, and making visible their reasoning process in a safe and supportive environment so that it can be carefully analyzed, and re-examined in the light of thoughtful feedback. See sources cited *supra* note 48. See also Russell G. Pearce, *Teaching Ethics Seriously: Legal Ethics as the Most Important Subject in Law School*, 29 LOY. U. CHI. L.J. 719 (1998) (urging that law schools promote the importance of legal ethics by making it a required, three credit, first year, first semester course and an upper level course, as well as incorporate ethics into all other classes); Bruce A. Green, *Less is More: Teaching Legal Ethics in Context*, 39 WM. & M. L. REV. 357 (1998) (promoting the idea of teaching legal ethics from a “contextual” standpoint rather than as a survey course as being more effective because it emphasizes the importance of context when making decisions and gives students more time to develop skills); Susan G. Kupfer, *Authentic Legal Practices*, 10 GEO. J. L. ETHICS, 33 (1996) (advocating the need to develop the capacity to make well reasoned, ethical decisions in lawyers and the importance of teaching this to students beyond the Model Code of Professional Responsibility); SYMPOSIUM, *supra* at note 35. Nevertheless, it seems to me that, within the three years of law

If we return to consider the problems which introduced this paper in light of what cognitive science teaches us about learning and acting we will see that they have several things in common:

1. Each of them was perceived as carrying significant risk to the lawyer.
2. In each case the lawyer had neither practice addressing such challenging problems, nor had they an apparently readily available source of support for analyzing or addressing the problem.
3. Each lawyer “downshifted.” (a) They acted as if there was no ethical issue to consider, despite their knowledge of the rules. Denial and avoidance are clear examples of “flight.” and (b) The problem solving behavior they chose to employ is perfectly explainable in terms of the “three principles” that were imbedded in their implicit memory in law school. They acted automatically, reverting to the tried and true.¹⁵⁹

If it is true that our reactions in the face of moral or ethical questions are most significantly automatic, driven by social intuitions, which are primarily governed by elaborately encoded, implied emotional memories,¹⁶⁰ and if the legal academy is concerned about our students’ performance as ethical lawyers, then law school are faced with a dilemma. On one hand, if students come to us with intuitions that incline them to be reflective and responsible about moral and ethical issues, to look at problems from multiple perspectives, to search, and then act consistently with the morally correct decision,¹⁶¹ we want to reinforce them, and also give them the tools to enable them to be both professionally responsible, and zealous and effective advocates for their clients. On the other hand, if they come to the law school with intuitions that do not incline them to consider issues of ethics and professional responsibility, other than perhaps as traps to avoid, rather than reinforcing those intuitions their legal education should seek to enhance their sensitivity and responsiveness to the important role that those issues play in our profession, while assuring them that to do so is not to surrender their effectiveness as advocates for their clients. Law schools should help them acquire the skills to pursue both goals simultaneously, and the emotional strength to do so. That is, we should strive to create new explicit and implicit emotional memory of being ethically responsible, while exercising the skills necessary to effective problem solving as advocates for their clients.

school, a single exposure to professional responsibility in a two or three credit mandatory, upper level course, often taught after the students have passed the MPRE, challenges even the very best of teachers to really engage the students at an emotional level. *C.f.*, Frenkel, *supra* note 25, at 20-23 (arguing that although professional responsibility is the only required subject in all law schools, it is difficult to teach because there is not a uniform format, duration or teaching method, there is not always institutional support in the form of resources and credit hours, and there is often a great deal of student resistance.) Moreover, by limiting the teaching of professional responsibility to the course in “Professional Responsibility,” we run the risk of limiting our students’ ability to apply the principles and practices we teach in that course to other contexts. *See e.g.*, HOW PEOPLE LEARN, *supra* note 134, at 62 (arguing that the ability to transfer knowledge from one situation to another depends upon the context in which it is first learned).

¹⁵⁹ *See infra* pp. 23-24.

¹⁶⁰ LEWIS ET AL., *supra* note 48; SCHACTER, *supra* note 52, at 189-190.

¹⁶¹ Haidt, *supra*, note 48, at 829; LEWIS, ET AL., *supra* note 48, at 169-190 (discussing the process by which psychotherapy helps individuals re-order their implicitly learned memories).

Motivation is the key to attitude change. Attitude change is driven by the need to affirm oneself as a good person. Self affirmation can be achieved by changing one's attitude about one's behavior - either changing the behavior so that it comports with prior values, or changing one's values as they relate to the extant behaviors.¹⁶²

As long as law schools teach students to value effective legal arguments without regard to the moral and ethical consequences of their actions, they will not be motivated to value embedding ethical and moral considerations in their professional behavior as lawyers.

III. BUILDING BETTER LAWYERS THROUGH CONTEXTUALLY RICH, EMOTIONALLY ENGAGED LEARNING¹⁶³

A. WHAT WOULD IT TAKE?

In order to make the best use of their analytical abilities in the face of ethically opaque situations, students also need to be motivated to do so, and to understand the historically developed "intuitions" that are pushing or pulling them in particular directions. They need to have the skills and confidence to engage in the type of analysis that encompasses both values and traditional legal analysis, and the courage to make professionally responsible choices in the face of conflicting values. And they should learn how to seek and obtain support when they need to work through problems freighted with ethical issues, as most practitioners do.

To achieve those results, law faculty will need to construct a learning environment specifically designed for that purpose.

B. WHAT WOULD EMOTIONALLY ENGAGED LEARNING in LAW SCHOOL LOOK LIKE?

1. Moral Diversity, Open Discussion, and Reflective Lawyering in a Law School Class.

Beyond the mastery of traditional lawyering skills, our students need to learn, to paraphrase Carrie Menkel-Meadow, to pose such questions, as:

"What are these parties trying to accomplish? [I.e., What are their real goals, needs, interests, and priorities?]? What are the likely/possible needs or interests of other parties who may be involved in the case, or in important, ongoing or potential, relationships with one or more of the parties?....

¹⁶² ZIVA KUNDA, *supra*, note 20, at 218-223. (reviewing the consistent research that supports the conclusion that motivation to believe that one is a good person drives changes in behavior and attitude about one's behavior)

¹⁶³ See Susan P. Sturm, *From Gladiators to Problem-Solvers: Connecting Conversations about Women, the Academy and the Legal Profession*, 4 DUKE J. GENDER L. & POL'Y 119 (1997) (combining the critiques of the model of lawyer as "gladiator" promoted in law school and the profession's marginalization of women and people of color to argue that the model of lawyer should be recast to that of problem solver, which would better address the needs of lawyers in society and serve to better include all); Lerner, *supra* note 27; SYMPOSIUM, *supra* note 27.

What is really at stake? ... What are the legal, social, economic, political, psychological, moral, or ethical risks and benefits of litigation? Of non-litigated outcomes? What other considerations might the client be willing to entertain, if they were brought to awareness? Are there ways to satisfy our client's needs as well as all, or some, of the needs of others? What other arrangements might be better to deal with this problem? Why might they be better or worse?"¹⁶⁴

They also need to ask themselves,

"Are there motivations or expectations that I have that are driving me toward, or away from, recommending, or even considering, particular strategies or tactics? Are their individual values or relationships, including, but not limited to those of my client, that might be impacted differently by our selection of strategy or tactics?"

Beyond their mastery of formal analytical, and argumentative skills, students should be able to consider the values, or social intuitions that underlie the choices they make, especially with respect to issues of professional responsibility, and consider perspectives other than their own, or that of the instrumentalist view of lawyering.¹⁶⁵ They need to be motivated to seek a morally and ethically appropriate solution, not merely to construct a plausible argument that leads to a pre-determined result. They need to have confidence that they can act in a morally appropriate way, in order to avoid downshifting in the face of morally challenging situations.

To achieve such goals, our students must become comfortable dealing with what Jonathan Haidt, Evan Rosenberg, and Holly Hamm have referred to as "moral diversity."¹⁶⁶ However, as Haidt, Rosenberg and Homm point out, there is a substantial body of social psychological research that indicates that moral diversity in a group makes it difficult for members to work together, because differences based upon "culture and world view" lead to "desires for ostracism and punishment."¹⁶⁷ Their own studies of University of Virginia undergraduates confirm that moral diversity reduces desires for interaction more than does demographic diversity.¹⁶⁸

At the same time, however, "participants [in their study] saw a special value in diversity in educational contexts.... [They] seemed to be saying that exposure to [moral] differences in the controlled and safe setting of a class room was desirable."¹⁶⁹ The fact that students in the Haidt, Rosenberg, and Homm study seemed to appreciate the value, and have less fear, of moral diversity in an academic setting suggests that just such a venue, or perhaps a law school class room, might well be appropriate for the introduction, open discussion, and reflection upon morally diverse values.

¹⁶⁴ Carrie Menkel-Meadow, *Taking Problem-Solving Pedagogy Seriously: A Response to the Attorney General*, 49 J. LEGAL EDUC. 14, 15 (1999).

¹⁶⁵ Frenkel, *supra* note 36, at 41-42.

¹⁶⁶ Jonathan Haidt, et. al., *Differentiating Diversities: Moral Diversity is Not Like Other Kinds*, 33 J. APPLIED PSYCHOL. 1 (2003). (defining "moral diversity" as "the state of a group when when a substantial percentage of its members ... does not value the most valued moral goods of the community. *Moral goods* are social, personal, or spiritual obligations (e.g., justice, social harmony, self-actualization, piety, chastity) to which one appeals to justify or criticize the practices and behaviors of others, and which are felt to be binding on all people.... Moral goods are experienced as affectively laden self-evident truths or intuitions...."); *Id.*, at 5.

¹⁶⁷ *Id.*, at 6.

¹⁶⁸ *Id.*, at 30.

¹⁶⁹ *Id.*

Yet, practice does not necessarily make perfect. Rather, it makes for more of the same, more automatically. If we want students to consider with open minds the positive weight of the moral values of others that differ from their own, and to appreciate the implications to others, as well as the effectiveness for their clients, of various behaviors, only feedback, discussion, reflection, and follow-up, led by someone skilled at evaluating their work, and communicating about it with them non-judgmentally, are likely to produce that result.¹⁷⁰ And they need the opportunity to reflect, reconsider, and try again.¹⁷¹ Feedback and reflection also teaches flexibility, transferability of knowledge, and that learning is built upon prior learning.¹⁷² Feedback and reflection thus build metacognition, the ability to understand one's own cognitive processes.¹⁷³

2. Let Them In On The Secret.

For more than 10 years, I have been teaching in a law school clinical program in which the students represent real clients. I also supervise externs, students whose clinical experience is with a legal organization outside of the law school, where all of their case supervision is by the organization's lawyers. In our clinic my clinical faculty colleagues and I supervise students representing clients of our law school-based "teaching law office." In the clinic seminar, we include a class explicitly designed to introduce our students to the idea that they come to their work with a broad array of values, assumptions, judgments, expectations, emotional needs, etc. With our externs we use the requirement that they maintain journals, which we read, and meet with us on a regular basis to introduce them to the importance of their own values and needs in assessing their sensory experiences, analyzing situations, and making judgments. We try to demonstrate that their values and emotional needs are based upon a lifetime of experience, *their* particular lifetime of experience, but not that of others - even others as similar to themselves as their classmates, let alone as different from themselves as their clients. These issues include, of course ethnic, gender, religious, and class stereotypes, but also a hierarchy of values covering a myriad of topics. We discuss, explicitly, theories about how these "social intuitions" influence what they see and hear, and how they interact with others, and make judgments, and ask them to consider these issues as they go about the work of representing their clients. And we urge them, too, not to be critical of themselves as they work to become aware of what forces are influencing their decision making. Throughout the semester in class and in supervision meetings we try to raise questions to help them see where and why their internal self is influencing their analytical and interpersonal work. Our semester is only 14 weeks long, but however skeptical and resistant the student may be when we introduce the topic, most are convinced by the end of the semester

¹⁷⁰ Cf. LEWIS ET AL., *supra* note 48 at 169-190 (discussing the lengthy and difficult process of psychotherapy in revising the implicitly learned neural code that directs our emotional lives); Haidt, *supra* note 48, at 829 ("Creating a community in which moral talk was ubiquitous ...and in which adults model good moral thinking And by talking about evidence, justifications, and mitigating factors [with discourse partners who are respected for their wisdom and judgment] ...more nuanced and ultimately more reasonable judgments are likely to be produced.").

¹⁷¹ HOW PEOPLE LEARN, *supra* note 138, at 58-60.

¹⁷² *Id.* at 68-69.

¹⁷³ *Id.* at 67.

that they are not the “analytical machine” that they had previously supposed. And, I have had many experiences of students by the end of the term who were able to articulate some of the subtle forces operating within themselves as they struggled with their clients’ problems.

By helping our students to understand these principles, and working with them to help them experience those forces in action in the safe environment of our classes and clinical work, we increase their ability to understand and control their impact.

3. Two Models of Instruction.

A. “Live Client” clinics

Law school clinics in which students represent real, clients offer a unique opportunity to learn how to figure out what really is the problem, to uncover what really is at stake, what unidentified relationships may be critical to one or another of the parties as they work towards a solution of the problem, etc. Student lawyers must examine and understand the problem as presented by the client, theorize as to potential solutions, plan and carry out legal research and factual investigation, remain open to ongoing re-examination of the critical issues, identify limits in their own knowledge and overcome those limits, integrate knowledge from other disciplines or domains, learn, build on their prior learning, exercise judgment, make choices and experience their consequences. Moreover, as Eleanor W. Myers has noted in assessing her simulation-based course, “Experience exerts a powerful influence over the exercise of discretion. Experiential learning is critical to moral development.”¹⁷⁴ “[I]t is not until students actually experience the reality of practice that they begin to internalize and make their own moral and ethical judgments that are at the core of practice.”¹⁷⁵ Clinics, in which the students represent clients in real matters under the close supervision of experienced lawyers/teachers, thus provide a quintessential locale for emotional engagement of law students in factually complex matters, challenging them to identify and grapple with issues of professional responsibility. They also provide the opportunity for frequent feedback and occasional modeling from experts. In such an atmosphere implicit, emotional learning is likely to take place.

At the same time, because they are “live,” every case is different and quite unpredictable at the outset. Given such unpredictability, it would be difficult to plan a problem solving or professional responsibility curricular thread solely around live client clinics.

B. Problem-Based Learning

Between live client clinics and Langdellian reliance on appellate opinions there is a pedagogy, or pedagogies, that will enable law students to engage in contextually rich, emotionally engaging, experiential learning. Problem-Based Learning (P-BL)¹⁷⁶ is one approach that gives us guidance on how to satisfy those needs.

¹⁷⁴ MYERS, SIMPLE TRUTHS, *supra* note 149, at 835; Myers, *supra* note 35, at 403-04.

¹⁷⁵ MYERS, SIMPLE TRUTHS, *supra* note 149, at 836.

¹⁷⁶ See, e.g., THE CHALLENGE OF PROBLEM-BASED LEARNING (David Boud & Graham I. Feletti eds., 2d ed. 1997) (critically examining problem based learning in a variety of learning environments); THE POWER OF PROBLEM-BASED LEARNING: A PRACTICAL “HOW TO” FOR TEACHING UNDERGRADUATE COURSES IN ANY DISCIPLINE (Barbara

PB-L is based upon the principle that by engaging students' interest and having them actively engaged in the learning process, the students will learn how they learn, as well as learning the concepts with which they are working to produce both more effective, usable knowledge and long term "learning capability."¹⁷⁷ Using P-BL, students develop an understanding of the facts and circumstances in which the problem is situated, define, or re-define, the problem(s) or goal(s), consider whatever competing interests may be involved, prioritize, identify the nature and sources of the information needed to achieve the goal, obtain that information, employ critical thinking, exercise judgment, reconsider earlier conclusions or assumptions, make and defend their decisions, reflect on their own learning process and results, and work with the situation as it evolves over time.¹⁷⁸ Essential to the process is the participation of a mentor, who can assist the learners to remain on task, collaborate, and encourage reflection on their work as they proceed.¹⁷⁹ For the reasons discussed below, P-BL can be expected to produce more elaborately encoded patterns of neural connections of the approach to problem solving demonstrated by professionals with adaptive expertise, as well as the ability to examine problems from multiple perspectives, which is essential to professionally responsible conduct.

(i). Motivating Students

Motivation stimulates attention and learning.¹⁸⁰ Motivation can be externally generated by the expectation of rewards or punishments (i.e., grades).¹⁸¹ However, learning tends to be more powerful when its motivation is internally generated by the learner's belief in the usefulness of the learning.¹⁸² A belief that what one is doing has real value to oneself or others is a powerful motivator.¹⁸³ Most students come to law school wanting to become lawyers. Thus, the more that

J. Duch et al. eds., 2001) (outlining useful strategies for how educators can introduce problem-based learning into their courses).

¹⁷⁷ David Boud & Graham I. Feletti, *THE CHALLENGE OF PROBLEM-BASED LEARNING*, *supra* note 176, at 2, 4; Barbara J. Duch et al., *Why Problem-Based Learning? A Case Study of Institutional Change in Undergraduate Education*, in *THE POWER OF PROBLEM-BASED LEARNING*, *supra* note 176, at 6.

¹⁷⁸ Barbara J. Duch et al., *Why Problem-Based Learning? A Case Study of Institutional Change in Undergraduate Education*, in *THE POWER OF PROBLEM-BASED LEARNING*, *supra* note 176, at 6; Barbara J. Duch, *Writing Problems for Deeper Understanding*, in *THE POWER OF PROBLEM-BASED LEARNING*, *supra* note 176, at 48-50; David Boud & Graham I. Feletti, *Introduction to THE CHALLENGE OF PROBLEM-BASED LEARNING*, *supra* note 176, at 1-2, Charles E. Engel, *Not Just a Method but a Way of Learning*, in *THE CHALLENGE OF PROBLEM-BASED LEARNING*, *supra* note 146, at 19.

¹⁷⁹ Deborah E. Allen & Harold B. White, III, *Undergraduate Group Facilitators to Meet the Challenges of Multiple Classroom Groups*, in *THE POWER OF PROBLEM-BASED LEARNING*, *supra* note 142, at 79-92; David Boud & Graham I. Feletti, *Introduction to THE CHALLENGE OF PROBLEM-BASED LEARNING*, *supra* note 172, at 2.

¹⁸⁰ ZIVA KUNDA, *supra*, note 20, at 211-216; HOW PEOPLE LEARN, *supra* note 134, at 60-61; Barbara J. Duch et al., *Why Problem-Based Learning? A Case Study of Institutional Change in Undergraduate Education*, in *THE POWER OF PROBLEM-BASED LEARNING*, *supra* note 173, at 6; David Boud & Graham I. Feletti, *Introduction to THE CHALLENGE OF PROBLEM-BASED LEARNING*, *supra* note 172, at 1-2; Cf. SYLWESTER, *supra* note 46, at 72; SCHACTER, *supra* note 52, at 44-45 acknowledging the importance of motivation, but arguing that the encoding-making part of experience - is equally, if not more essential.

¹⁸¹ HOW PEOPLE LEARN, *supra* note 134, at 60.

¹⁸² *Id.* at 61. Both Sylwester and Caine & Caine point out that external motivation can actually limit a person's internal motivation. SYLWESTER, *supra* note 46, at 75-76; CAINE & CAINE, *supra* note 43, at 76-77. Accord, Dewey, *supra* note 92, at 67 ("There is, I think, no point in the philosophy of progressive education which is sounder than its emphasis upon the importance of the participation of the learner in the formation of the purposes which direct his activities in the learning process. ...").

¹⁸³ *Id.*

students feel that the problems they confront in law school actually relate to the real world of lawyering, the greater their internal motivation to engage with them, and the greater their learning from that experience.¹⁸⁴

(ii). Teaching Students to be Adaptive Problem Solvers

Langdellian, case-method, teaching provides the students with all of the information they need, from the statement of the problem to the facts and legal authorities available for its solution. But lawyers seldom have such luxury. Frequently, they help to clarify the question, investigate the facts, recognize that over time everything, even the client's goals and priorities, may change, find, or create, the legal principles that best support the client, and then marshal the evidence that best supports the application of those principles. P-BL, by providing limited information at the outset of the problem calls on the students to engage in similar activities to those of the lawyer. Students thus learn to exercise judgment to identify and obtain necessary information to consider the implications of change over time, both factually and legally, as well as relationships that might continue beyond the solution of the presenting problem, to understand their own thought processes, recognize the limits of their own knowledge, and to identify and secure resources appropriate to the solution of the problem (Metacognition).

(iv). Collaboration

Most lawyers work collaboratively in addressing clients' problems. Collaboration is an immeasurably valuable tool in addressing ethical problems. In most law school course work, however, collaboration is a violation of the honor code. Moreover, law schools provide no support for creating, effectively using, or evaluating collaborations. The students learn about group process and collaboration as a skill only by chance.

P-BL advocates consistently urge that students be required to work in teams for several reasons. First, it brings together the collective skills of the team members,¹⁸⁵ demonstrating the appropriateness and value of collaboration to work and scholarship.¹⁸⁶ Collaboration reduces the individual student's sense of isolation, which tends to improve performance.¹⁸⁷ Less isolation may produce less fear, and thus less "downshifting."¹⁸⁸ Students are likely to be motivated to be able to contribute to the team's goals, thereby increasing their emotional engagement with the problem.¹⁸⁹ Collaboration requires them to make decisions and to communicate effectively to their teammates the evidence and reasons supporting those decisions.¹⁹⁰ It thereby improves

¹⁸⁴ Dewey, *supra* note 92, at 67.

¹⁸⁵ Barbara J. Duch et al., *Why Problem-Based Learning? A Case Study of Institutional Change in Undergraduate Education*, in *THE POWER OF PROBLEM-BASED LEARNING*, *supra* note 176, at 6.

¹⁸⁶ Barbara J. Duch et al., *Strategies for Using Groups*, in *THE POWER OF PROBLEM-BASED LEARNING*, *supra* note 176, at 60.

¹⁸⁷ *Id.*

¹⁸⁸ *Id.*; See discussion *supra* pp. 12-13.

¹⁸⁹ See, "Motivating Students," *supra* pp. 36-37; "The Importance of Emotion in Creating Memory," *supra* pp. 11-12. Of course, some students may take the opportunity of group work to avoid responsibility and work, expecting that others will do it. But even that has consequences that may, if it is identified, articulated and addressed, provide important learning about ethical judgment.

¹⁹⁰ Barbara J. Duch, *Writing Problems for Deeper Understanding*, in *THE POWER OF PROBLEM-BASED LEARNING*, *supra* note 176, at 49-50.

both reasoning and communication skills.¹⁹¹ The process of working in teams also generates appreciation for differences in learning and communication styles, increasing social maturity.¹⁹² Collaboration can significantly increase one's exposure to other perspectives, and values.

However, as anyone who has read *Lord of the Flies*,¹⁹³ or observed a group of unsupervised children at play, knows, group work can get messy and counterproductive¹⁹⁴, not to mention emotionally harmful. To avoid those pitfalls, and keep the group on task, and really collaborating – as opposed to competing or engaging in “parallel play” – a group facilitator is required.¹⁹⁵ In their course, Eleanor W. Myers and Nancy Knauer, used practitioners who, as adjunct faculty, met periodically with the students in small groups.¹⁹⁶ In *Law and Lawyering in the Workplace*,¹⁹⁷ Professor Sturm and I were able to perform that role assisted by one teaching assistant because we controlled the class size. In my law school's first year legal writing course, carefully selected and trained third year students, under the supervision of the faculty head of the program are the facilitators. In live client clinics, the clinical supervisors perform this function for the teams of students they supervise.

(iv). Teaching Our Students to Avoid Downshifting

Downshifting occurs when the situation creates too high a level of stress, for example, when it appears to the individual to pose an insoluble problem, and the risk of error is too great. If law students are placed in realistic, though simulated, situations involving ethical dilemmas comparable to those faced by lawyers, supported in their efforts to solve the problem, given the opportunity to reflect on their work, individually, among their peers, and with supervision so that they can see what worked, what did not, and why, and what other options might have been considered, actively encouraged to consider multiple perspectives and the ethical dimensions throughout the process, and called on to repeat that process at various points throughout law school, the implicit messages will be (1) that seeking and applying ethically correct answers is important for lawyers; (2) these problems are soluble, and (3) that they are competent to solve them. They will have felt the intellectual, emotional, and moral challenge of the problem. Likely, they will have experienced trial and error, without dire consequences, but rather the opportunity for reflective consideration of their process and others that they might have pursued. They will be supported to value identifying and working towards an ethical solution to ethical problems, rather than merely making an argument to achieve predetermined outcomes. They will understand the relevant concepts, in the contexts in which they arise, and have a bank of experience to call on in addressing moral and ethical problems when they arise in “real life.” Given such experience and knowledge, as lawyers they should be less likely to respond automatically, or to downshift, and more likely to engage their sophisticated cognitive powers when such dilemmas arise in the future.

¹⁹¹ Barbara J. Duch et al., *Why Problem-Based Learning? A Case Study of Institutional Change in Undergraduate Education*, in *THE POWER OF PROBLEM-BASED LEARNING*, *supra* note 176, at 6.

¹⁹² *Id.*; Barbara J. Duch et al., *Strategies for Using Groups*, in *THE POWER OF PROBLEM-BASED LEARNING*, *supra* note 178, at 60.

¹⁹³ WILLIAM GOLDING, *LORD OF THE FLIES* (1997).

¹⁹⁴ See, Jonathan Haidt, et. al., *supra*, note 168, at 5-7.

¹⁹⁵ Deborah E. Allen & Harold B. White, III, *Undergraduate Group Facilitators to Meet the Challenges of Multiple Classroom Groups*, in *THE POWER OF PROBLEM-BASED LEARNING*, *supra* note 146, at 80-83.

¹⁹⁶ Myers, *supra* note 35, at 407-8.

¹⁹⁷ Lerner, *supra* note 28.

(v). Adapting Problem-Based Learning to Law School

Adapting P-BL to legal education should not be difficult.¹⁹⁸ For example, Professors Eleanor W. Myers and Nancy Knauer teach an “Integrated Transactional Practice Course” (ITP), in which they combine the teaching of Trusts and Estates and Professional Responsibility using “long-term, live simulations.”¹⁹⁹ The course was designed starting with the desired progression of the trusts and estates issues, then building in professional responsibility problems in a sequence that Myers says “developed naturally.”²⁰⁰ They use six client files, which they have attempted to make realistic. In so doing, they have created the underlying “stories” of “the parties, their lawyers, their decisions and choices, and provide a full description of the factual context in which the matter arose.”²⁰¹ The students grapple with the problems in the “first person,” experiencing the challenges, and the emotion of exercising discretion and judgment, and assuming personal responsibility.²⁰² Throughout the course, the faculty is available as “mentors” to facilitate discussion of substantive, strategic and ethical issues.²⁰³

For many years, New York University Law School has had a first year course, “The Lawyering Program,” in which small groups of students, frequently sub-divided into smaller teams, addresses a series of problems typical of problems faced by lawyers in daily practice. Teaching both legal “analysis” and lawyering “skills” are goals of the course. Imbedded in certain of the problems, e.g., counseling and negotiating, are ethical issues. There is detailed faculty feedback after each exercise.²⁰⁴

A less ambitious example was “Law and Lawyering In The Work Place,”²⁰⁵ in which Susan Sturm and I, using employment discrimination law as our subject matter, created a series of problems for each segment of the course. Each problem required the application of the doctrinal principles covered in the current course segment and built upon the work done earlier in the

¹⁹⁸ For an example of P-BL in non-US style (i.e., undergraduate) legal education, see Keith Winsor, *Applying Problem-Based Learning to Practical Legal Training*, in THE CHALLENGE OF PROBLEM-BASED LEARNING, *supra* note 142, at 224-232 (discussing the creation and implementation of the Practical Skills Course taught at the College of Law, New South Wales, Australia). For a discussion of the use of P-BL in medical education, see, T.J. David and Leena Patel, *Adult Learning Theory, Problem Based Learning, And Pediatrics*, 73 Archives of Disease in Children, 357 (October, 1997). In addition, Professor Myers has offered to share her “Nuts and Bolts Suggestions for Integrated Education” with anyone who asks. Myers, *supra* note 35, at 401, n. 1.

¹⁹⁹ Myers, *supra* note 35.

²⁰⁰ *Id.* at 405.

²⁰¹ *Id.* at 406.

²⁰² *Id.* at 411. In order to create simulations that are realistic and emotionally engaging law schools can use scripted parts for clients and witnesses played by professional actors or repeat performing amateurs much as medical schools use “standardized patients.” See, Lawrence M. Grossberg, *Medical Education Again Provides A Model For Law Schools: The Standardized Patient Becomes the Standardized Client*, 51 J. LEGAL EDUC. 212 (2001)

²⁰³ Myers, *supra* note 35, at 408-10.

²⁰⁴ Materials on file with author. For examples of other first year courses in lawyering, which incorporate some or all of the principal elements of P-B L, see, e.g., Franklin M. Schultz, *Teaching “Lawyering” To First Year Students: An Experiment In Constructing Legal Competence*, 52 WASH. AND LEE L. REV. 1643 (1995) (describing the first year lawyering course at Washington and Lee Law School); Nancy M. Maurer and Linda Fitts Mischler, *Introduction To Lawyering: Teaching First Year Students To Think Like Professionals*, 44 J. LEGAL ED. 96 (March, 1994) (describing the first year lawyering course at Albany Law School); Dean Braverman, *Law Firm: A First-Year Course On Lawyering*, 39 J. LEGAL ED. 501 (discussing the first year lawyering course at Syracuse University Law School).

²⁰⁵ See, Lerner, *supra* note 28.

semester. For each, the students were required to act “in role” and to employ different skills that lawyers regularly use in representing their clients. A number of the problems required the students to work collaboratively. After each role play, we provided feedback to the individual students as well as to the class as a whole. Frequently, lawyers, or other experts (e.g., police officials, statisticians, women’s’ rights advocates, etc.), participated in the problems, and also provided feedback.

The National Institute for Trial Advocacy (NITA) has been teaching trial skills to lawyers and law students for 30 years, using both individual problems (i.e., short, fact statements focused on a particular skill), and entire mock “case files” that call upon the “students” to read the factual material, decide on the legal and factual theories they will pursue, marshal the evidence and legal arguments they need, anticipate their adversaries theories and arguments and prepare to meet them, prepare their witnesses, decide upon and obtain trial exhibits, and then perform the trial under the scrutiny of experts, who provide feedback. From the experience of the NITA model, a number of law schools have developed integrated courses which teach evidence, trial advocacy and professional responsibility.²⁰⁶

Examples of courses which integrate problem solving with professional responsibility are also available.²⁰⁷ The Center For Professionalism at The University of Pennsylvania Law School produced videos of a number of factually complex “stories” in which professional responsibility issues were imbedded. These videos were widely used to educate law students, lawyers, and judges. Their model was to present a segment of a “story,” stop, have the audience, guided by a trained presenter, discuss the facts, and identify and address whatever ethical issues they spotted, and before moving on to the next segment in which the story continued. Each segment included actual ethical problems and/or conduct that might well lead to such problems if followed.²⁰⁸

David Luban and Michael Millman, have developed a live client clinical course which consciously incorporates professional responsibility as a for-credit element of the course.²⁰⁹

In his Professional Responsibility course, Douglas Frenkel consciously seeks to create an environment in which his students “can experience a situation on both intellectual and emotional planes. ...[By placing them] in unresolved situations that are complex in terms of variables internal[ly] and external[ly] . . . with current facts unclear, future consequences undefined, and resolution susceptible to several choices”²¹⁰ He uses problems taken from real cases, places students in role, and encourages collaboration among the students.²¹¹ At the conclusion of each problem he leads discussion and reflection among the class members.²¹²

²⁰⁶ I am personally familiar with the courses at Temple University’s Beasley School of Law, and Weidner University Law School where I have participated as a faculty member, and the one at the University of Pennsylvania Law School, where I teach.

²⁰⁷ See articles discussing a variety of efforts to improve the teaching of Professional Responsibility, including efforts to integrate that subject matter with various substantive courses, some with efforts to place the students “in role” such as SYMPOSIUM, *supra* note 28.

²⁰⁸ Edmund B. Spaeth, Jr. et al., *Teaching Legal Ethics: Exploring the Continuum*, 58 LAW & CONTEMP. PROBS., 159, 159-160 (1995).

²⁰⁹ Luban & Milman, *supra* note 35.

²¹⁰ Frenkel, *supra* note 35, at 29.

²¹¹ *Id.* at 33, 35, 39-40.

²¹² *Id.* at 41.

C. WHEN AND WHERE TO ENGAGE THE STUDENTS

1. Start in the First Year

The University of California at Berkeley's Boalt Hall Law School experimented with a three year program introducing legal ethics in the first year curriculum and then discarded the idea, opting to move the course to the second year, in large measure because of a combination of student and faculty opposition.²¹³ Students regarded the two credit course as less important than their other course work, described the "study of legal ethics as "patronizing, preachy, irrelevant, or intellectually soft,"²¹⁴ and evaluated the instructors' performance significantly below that of their other teachers.²¹⁵ For their part, faculty felt that by including the course in the first year, students suffered because they lacked "exposure to relevant advanced courses" and had little, if any, practice experience.²¹⁶ Other schools have also tried, and rejected, the idea. Nevertheless, I submit that there are useful reasons for introducing professional responsibility into the first year curriculum.

First, assuming that we are fighting a battle to overcome, or reinforce in the face of negative learning in law school, students' social intuitions, the sooner we get started the better. Three years offers more opportunity than two.

Second, students arrive at law school excited to be initiated into the world of law and lawyering. They are emotionally prepared to accept that learning from their first year courses and professors. What we omit, as what we include in the first year curriculum, sends an implicit, but readily learned, message about what we think – no, what we "know" – is important for lawyers to do, and therefore for law students to learn. Consequently, "it is what is imprinted in that initial immersion and not any broader messages of the three years, that shapes the students' consciousness of what is important and not important to being a lawyer."²¹⁷ Again, if it is their intuitions, developed over many years, that we are trying to overcome or reinforce in connection with their roles as lawyers, we can expect them to be more open to that in the first year before they become jaded. My experience with the Law & Lawyering In The Workplace²¹⁸ course convinced me that by the end of one semester of law school, we have effectively inculcated in our students the "three principles" of legal problem solving. Thereafter, it is difficult to get them to "unlearn" that process or to supplement it with broader considerations that are necessary for the problem solving necessary in representing clients in the practice of law.

²¹³ Stephen McG. Bundy, *Ethics Education in the First Year: An Experiment*, 58 LAW & CONTEMP. PROBS., 19, 25 (1995).

²¹⁴ *Id.* at 27.

²¹⁵ *Id.* at 25.

²¹⁶ *Id.* at 28.

²¹⁷ Lesnick, *supra*, note 80, at 1159. *See also*, Russell G. Pearce, *Teaching Ethics Seriously: Legal Ethics as the Most Important Course in Law School*, 29 LOY. U. CHI. L.J. 719, 735-36 (1998)(urging that law schools promote the importance of legal ethics by making it a required, three credit, first year, first semester course and an upper level course as well, and also incorporate ethics into all courses).

²¹⁸ *See discussion supra* note 33.

Surely the first year curriculum is important and crowded. Yet, I know of no evidence that teaching first year students to engage in creative problem solving would interfere with their learning traditional legal analysis. I also know of no evidence that a first semester, or first year, of law school which devoted less than 100% of course time to teaching only the traditional approach to legal problem solving would, in any manner or degree, impair law students' analytical abilities, or other functioning as lawyers. Hence, I must conclude that teaching broad based problem solving techniques in the first year would be a valuable addition to the legal education of our students.

Problems of design for the inclusion of professional responsibility in the first year curriculum can be overcome. Deborah Rhode,²¹⁹ Carrie Menkel-Meadow,²²⁰ and others have developed such materials. Moreover, faculty who teach in the first year curriculum are certainly capable of learning to use such materials in order to make their inclusion meaningful, and effective.²²¹

2. Teach Pervasively

Deborah Rhode argues that law students can best understand by having ethical issues arise in all of their courses.²²² Her position is supported by the recent research on memory, discussed above in Part II. Moreover, as we have seen, understanding, and learning to apply the transferability of learning requires that we teach it in multiple contexts.²²³ Professional responsibility problems arise in every type of practice, in every subject matter, and perhaps every day, for lawyers. If we want law students to be prepared to recognize and address ethical issues as part of their every day practice of law those problems should present themselves as part of their "every day" legal education in order that elaborately encoded implicit memory for those experiences is created. If students encountered ethical issues in five different courses, they would have the opportunity of recognizing them in five different contexts. Engaging with ethical issues under the tutelage of five different professors' is also likely to produce a much richer learning experience than doing so with only one.

IV. CONCLUSION

"A rational approach to curriculum design would begin with an assessment of the law school's mission and of the kind of student we wish to train and would then attempt to divine an appropriate blend and sequence law, institutions, skills, perspectives and professional issues."²²⁴ For many years, the legal profession has recognized that the kind of lawyers that clients, the profession and the community needs, are those who can carry out their professional responsibilities as representatives of their clients, officers of the judicial system, and public citizens exercising moral and ethical judgment of the highest order.²²⁵ Unfortunately, most law

²¹⁹ See generally RHODE, *supra* note 16.

²²⁰ Menkel-Meadow, *supra* note 163.

²²¹ Note that in the second and third year iterations of its first year professional responsibility course, Boalt Hall added problems drawn from practice, role plays, small group work, increased faculty feed back and role plays explicitly tied to development of lawyering skills. As a result, students' reaction to the course, and teacher evaluations dramatically improved. Bundy, *supra* note 216, at 26-7.

²²² RHODE, *supra* note 16, at 4-5.

²²³ HOW PEOPLE LEARN, *supra* note 138, at 62-63, 68-9.

²²⁴ Robert A. Gorman, *Introduction, Curriculum Developments: A Symposium*, 39 J. Leg. Ed. 469 (December 1989).

²²⁵ MODEL RULES, Preamble.

schools have either not accepted as a significant part of their mission the role of training law students for that practice mode, or otherwise ignored Professor Gorman's admonition.²²⁶

Consequently, prevalent law school curriculum and pedagogy are not well suited to producing lawyers well equipped for either role. Seeing this, many law professors have experimented with course design and delivery seeking to impart these traits and practices to their students. Recent discoveries in cognitive psychology and neuroscience demonstrate rather clearly that a pedagogy based upon contextually rich, emotionally engaging, role based, problem solving, coupled with ongoing reflective discourse is most likely to significantly enhance law students' effective engagement with, and mastery of, the role of ethical practitioner. It is now up to us to engage that learning in our teaching.

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²²⁶ Gorman, *supra* note 223, at 469.