

Washington Law Review

Volume 82
Number 3 *Symposium: Of Salmon, the Sound,
and the Shifting Sands of Environmental
Law—A National Perspective*

8-1-2007

Teaching Environmental Law in the Era of Climate Change: A Few Whats, Whys, and Hows

Michael Robinson-Dorn
University of Washington School of Law

Follow this and additional works at: <https://digitalcommons.law.uw.edu/wlr>



Part of the [Environmental Law Commons](#), and the [Legal Education Commons](#)

Recommended Citation

Michael Robinson-Dorn, Essay, *Teaching Environmental Law in the Era of Climate Change: A Few Whats, Whys, and Hows*, 82 Wash. L. Rev. 619 (2007).

Available at: <https://digitalcommons.law.uw.edu/wlr/vol82/iss3/11>

This Essay is brought to you for free and open access by the Law Reviews and Journals at UW Law Digital Commons. It has been accepted for inclusion in Washington Law Review by an authorized editor of UW Law Digital Commons. For more information, please contact cnyberg@uw.edu.

TEACHING ENVIRONMENTAL LAW IN THE ERA OF CLIMATE CHANGE: A FEW WHATS, WHYS, AND HOWS

Michael Robinson-Dorn*

INTRODUCTION	620
I. PREPARING THE NEXTGEN PROBLEM SOLVERS	624
A. A Few Whats (and Whys).....	625
1. Passion.....	628
2. Creativity	629
3. Knowledge and Reasoning in Law	631
4. Interdisciplinary Knowledge and Breadth of Mind	633
B. A Few Hows	634
1. Cross-Disciplinary Integrated Seminars: The “Deep Dives”	635
2. Experiential Learning	637
a. Case Studies and Simulations	638
b. The Clinical Experience	639
II. A RESPONSE TO ANTICIPATED CRITIQUES	644
CONCLUSION	648

* Assistant Professor of Law and Director, Kathy and Steve Berman Environmental Law Clinic, University of Washington School of Law. My thanks to the Whitely Center at the University of Washington Friday Harbor Laboratories for providing me with a few days of solitude to reflect on teaching and draft the bulk of my remarks. This essay is an excerpt of the remarks I prepared as the final speaker at the conference honoring Professor William H. Rodgers, Jr., on the occasion of this celebration of his first 40 years in the academy. My debts to Bill, accumulated over the last four years that I have been teaching at the University of Washington, are many. It is an honor to have been a part of the celebration.

Those familiar with his writings will instantly recognize that I have borrowed the formulation for the latter part of the title for these remarks in homage to Bill. See William H. Rodgers, Jr., *The Most Creative Moments in the History of Environmental Law: The Whats*, 2000 U. ILL. L. REV. 1 (2000) [hereinafter Rodgers, *The Whats*]; William H. Rodgers, Jr., *The Most Creative Moments in the History of Environmental Law: The Who's*, 39 WASHBURN L.J. 1, 1 (1999) [hereinafter Rodgers, *The Whos*]; see also Zygmunt B. Plater, *Environmental Law and Three Economies: Navigating a Sprawling Field of Study, Practice and Societal Governance in Which Everything is Connected to Everything Else*, 23 HARV. ENVTL. L. REV. 359, 360 (1999) (“*what to teach and deciding how to teach it.*”).

INTRODUCTION

One of our key objectives at this celebration has been to explore the future of environmental law. To continue the exploration, I've chosen to address not an area of environmental law or environmental practice, but rather the teaching of environmental law.¹

In large measure, the impetus for this essay came from John Bonine, who also contributed to this symposium. Late last year, following a flurry of emails addressing whether EPA had authority to regulate greenhouse gases (*Massachusetts v. EPA*²), John posted the following provocation to the environmental law professors listserv:

Folks, I have to say that some of our recent discussions seem a bit academic, and not necessarily in the good sense, for this combination professor-and-concerned citizen.

If our job as law professors is to figure out whether EPA was given the authority 36 years ago to control the most serious air pollution threat the world has ever known, I guess we're all on track. I certainly like to entertain myself with intellectual word-and-statute games as much as anyone, as I think I have proved in my own recent postings.

But is that all there is? *Can we really afford to be bystanders?* We are in a full blown emergency now. I expect to have shuffled off this planet before things get really bad, but not my children, and not their children.

.....

To bring it back to the role of environmental law professors, *what are we doing to prepare our future lawyers?* Something other than figuring out whether [Justice] Kennedy will vote with [Justice] Scalia to provide the 5th vote to do nothing, I presume.³

To which Professor Fredrico Cheever, quickly added:

Much as I have enjoyed the recent discussions about the Clean Air Act, I am inclined to agree with John. The rules of the game have changed, the reference in which environmental law in the

1. I use the phrase "environmental law" very broadly to include the fields of environmental and natural resources law, toxic torts, and environmental justice.

2. ___ U.S. ___, 127 S. Ct 1438 (2007).

3. Email from Professor John Bonine (University of Oregon Law School) to the ENVLAWPROFESSORS listserv (Dec. 5, 2006) (on file with author) (emphasis added).

United States (and every other nation I know about) no longer exists. All politics aside, *how do we train lawyers to deal with the endless disputes that will arise from shifting ecosystems, shifting agricultural areas and shifting human population? How do we train them to draft protective legislation (to preserve the atmosphere or oceans) on a scale rarely (if ever) attempted before?*⁴

John and Fred's provocations were followed in short order by the release of *Educating Lawyers: Preparation for the Profession of Law (Carnegie Report)*,⁵ a Carnegie Foundation study reporting on what we do and do not do so well in law school teaching. That was followed by the release of the report on the *Best Practices For Legal Education: A Vision and Roadmap (Best Practices Report)*,⁶ which I had previously been working from in its draft form. The *Best Practices Report*, as the name suggests, provides a comprehensive report on the best practices for law school teaching, and is insistent in calling for reform.

As if that were not enough, my faculty colleagues here at the University of Washington were in the concluding phase of a multi-year effort to revise the first year curriculum and were embarking on discussions about curricular reform in the second and third years, involving various "clusters" including environmental law, administrative law and clinical law—all areas in which I teach. So, you might say that the pump was primed; I was thinking about law school pedagogy,⁷ planning this conference, and working on several climate change matters.

4. Email from Professor Fredrico Cheever (University of Denver Law School) to ENVLAWPROFESSORS listserv (Dec. 6, 2006) (on file with author) (emphasis added).

5. William M. Sullivan, et al., *EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW* (2007) [hereinafter *Carnegie Report*].

6. Roy Stuckey et al., *BEST PRACTICES FOR LEGAL EDUCATION: A VISION AND A ROADMAP* (2007) [hereinafter *Best Practices Report*].

7. At approximately the same time, Stanford Law School also announced an ambitious program of curricular reform focused on the second and third years of law school, which includes "study of other disciplines with team-oriented, problem-solving techniques and expanded clinical training that enables students to represent clients and litigate cases—before they graduate," see *A "3D" JD: Stanford Law School Announces New Model for Legal Education* (Nov. 28, 2006), available at <http://www.law.stanford.edu/news/pr47>, as part of an effort that Stanford's Dean Larry Kramer has called learning to "think like clients." Memorandum from Larry Kramer, Richard E. Lang Professor of Law and Dean of the Stanford Law School, to Members of the Board of Trustees (Feb. 12, 2007) (on file with author); see also Report from the Dean of the Law School to the Members of the Academic Council, Thirty-Ninth Senate Report No. 8 Summary, available at <http://news-service.stanford.edu/news/2007/march14/minutes-031407.html>.

In this essay, I will respond to John's listserv provocation: *What* should we be teaching to the next generation of environmental law students? And, in addition, the embedded question of *why* (what are the goals), and the natural follow-on, *how* should we go about this teaching?

Before I start to address these questions, a few caveats are in order. First, as surely most of you know well, I am not the first person to address the questions of *what* and *how* we teach environmental law. At the end of the 1980s and 1990s, for example, a couple of titans of our field, Professors Joe Sax⁸ and Zygmunt Plater,⁹ addressed the subject. Thereafter, Professor Robert Percival published a robust follow-up article,¹⁰ and there have been pieces on teaching environmental law written by several others as well¹¹—substantial, thoughtful pieces—that I cannot, and do not, seek to replicate or critique here. Likewise, much, much, more has been written about clinical education and its pedagogy.¹² I cannot possibly begin to do justice to those subjects at the 30,000 foot, thirty page fly-over that I am about to undertake. By way of comparison, the *Carnegie Report*, to which I previously referred¹³

8. Joseph L. Sax, *Environmental Law In The Law Schools: What We Teach And How We Feel About It*, 19 ENVTL. L. REP. 10,251 (June 1989).

9. Plater, *supra* note *.

10. Robert V. Percival, *Green Briefs and Toxic Torts: Educating Lawyers with Environmental Savvy*, 35 ENV'T 7 (1993) (a thoughtful, and near comprehensive survey which, unfortunately for our law school, did not address in any detail the University of Washington's environmental law program and early LLM-experience).

11. See, e.g., Joel Mintz, *Teaching Environmental Law: Some Observations on Curriculum and Materials*, 33 J. LEGAL EDUC. 94 (1983); Heidi Gorovitz Roberston, *Methods for Teaching Environmental Law: Some Thoughts on Providing Access to the Environmental Law System* 23 COLUM. J. ENVTL. L. 237, 239 (1998) (writing "[u]nfortunately, students entering the field of environmental law have little understanding about what environmental law is and what environmental lawyers do"); A. Dan Tarlock, *Current Trends in the Development of an Environmental Law Curriculum*, in LAW AND THE ENVIRONMENT 297 (M. Baldwin & J. Page eds., 1970); see also Kim Diana Connolly, *The Entire Elephant: Teaching Sustainable Development Through Interdisciplinary Law School Classes* (2004), available at http://campus-sostenible.mty.itesm.mx/emsuiii/PDF_articulos_completos/a01_001_k_connolly_full.pdf.

12. Indeed, there is an entire law journal dedicated to the area: the *Clinical Law Review*. See also Margaret M. Barry et al., *Clinical Education For This Millennium: The Third Wave*, 7 CLINICAL L. REV. 1 (2000); *Carnegie Report*, *supra* note 5; *Best Practices Report*, *supra* note 6; American Bar Association Section on Legal Education and Admissions to the Bar, *Legal Education and Professional Development: An Educational Continuum*, Report of the Task Force on Law Schools and the Profession: Narrowing the Gap (1992) [hereafter *MacCrate Report*].

13. *Carnegie Report*, *supra* note 5.

weighs in at just over 200 pages, and the *Best Practices Report*¹⁴ is even longer at nearly 300 pages.

Second, and equally obvious, unlike our celebrant, Bill Rodgers, who has forty years of teaching under his belt, to say nothing of the experience of the other contributors to this symposium, I have been teaching but four years. Even if you add in my dozen years of practice before joining the academy, it still pales in comparison. Indeed, Oliver Houck's reference during his conference speech to his passion for running water, and man's insatiable appetite to tame nature, reminded me all too vividly of the well-worn joke involving the Johnstown flood victim and Noah. I will not repeat the joke now, but suffice it to say, I am quite aware of the audacious nature of this undertaking, and I feel very much like I am about to begin lecturing on my knowledge of floods to a bevy of Noahs.

A final limitation relates to what my colleague Kim Connelly, at the University of South Carolina School of Law, often refers to as an "ecosystem" issue. I am writing from the perspective of, and experience with, a law school like my own. I do so with the full knowledge that the University of Washington is not representative of all 195¹⁵ accredited law schools, or even most of them. We have the advantages of being part of one of the premier research universities in the world, where environmental research and collaboration are infused throughout dozens of programs, departments, schools, and colleges.¹⁶ And, as this symposium reminds us, we sit in a law school with a rich history in environmental law and active engagement in environmental issues, dating back not only to Bill Rodgers, but also to his former colleagues Professors Charlie Corker, Bill Burke, and Ralph Johnson. This tradition continues to this day with our colleagues Professors Bob Anderson, Ron Whitener, Craig Allen, and Interim Dean Gregory Hicks, among others. We're also fortunate to have a strong and robust clinical program with

14. Best Practices Report, *supra* note 6.

15. See American Bar Association, ABA Approved Law Schools, <http://www.abanet.org/legaled/approvedlawschools/approved.html> (last visited Sept. 3, 2007).

16. E.g., University of Washington Earth Initiative, *available at* <http://www.uwei.washington.edu/about>; University of Washington Program on the Environment, *available at* <http://depts.washington.edu/poeweb>; University of Washington Program on Climate Change, *available at* <http://depts.washington.edu/uwpc>; as well as the University of Washington's School of Public Health and Community Medicine, College of Forest Resources, College of Ocean and Fishery Sciences, College of Engineering, Department of Earth and Space Sciences, and College of Architecture and Urban Planning.

nearly a dozen in-house clinics, including an environmental law clinic. And, as Professor Donna Christie reminded me just before the conference, we do all of this in the midst of one of the most environmentally progressive cities in the United States. In short, we are darn fortunate and well-adapted to our ecosystem.

With those limitations now explicit, I hope that I have made it clear that this is meant largely as a thought piece rather than a typical law review exegesis. I hope to provoke the dialogue *toward* answering fundamental questions about *what* we should teach, *why* we should teach it, and *how* we should go about that task. It is an effort that I hope will engage not only the usual suspects for such pieces, a few fellow teachers and the watchful eye of a student law review editor, but also practitioners, judges, policymakers, and the employers of lawyers—clients.¹⁷ And, though not every law school has such a nurturing ecosystem, there are a good number of leading institutions like ours that do, and for those that do not, I believe that much of what follows can still be fodder for discussions, and perhaps some action.

My response to Professor Bonine's provocation utilizes a broad framework of questions concerning law school pedagogy.

I. PREPARING THE NEXTGEN¹⁸ PROBLEM SOLVERS

It will likely come as a surprise to few who read this piece that the perception among many is that law schools, in general, are not doing a very good job training lawyers. As the recent *Carnegie Report*¹⁹ explains, most law schools are giving “only casual attention to teaching students how to use legal thinking in the complexity of actual law practice.”²⁰ Indeed, the *Carnegie Report* sharply criticizes law schools for focusing too heavily, indeed almost exclusively, on developing doctrinal knowledge and a fairly narrow range of intellectual skills. As

17. See Best Practices Report, *supra* note 6, at 272 (including as “best practice” Principle 5: soliciting and incorporating opinions from outside the academy).

18. “Generation Next” is the generation following “Generation X.” The Generation Next cohort was born between 1981 and 1988 and they will soon be entering our law schools. THE PEW RESEARCH CTR., HOW YOUNG PEOPLE VIEW THEIR LIVES, FUTURE AND POLITICS: A PORTRAIT OF “GENERATION NEXT” (2007) (noting that, among other factors, Generation Next has been shaped by an unprecedented revolution in technology, terrorism, war, and rapid change).

19. Carnegie Report, *supra* note 5.

20. Executive Summary of Carnegie Report at 6, available at http://www.carnegiefoundation.org/files/elibrary/EducatingLawyers_summary.pdf.

one of the *Carnegie Report's* principal authors explains, the gap “between teaching students to think like a lawyer and act like a lawyer—especially in ethical situations—is greater than ever.”²¹ In short, the *Carnegie Report* concludes that we are failing to graduate law students who are well-equipped to practice law competently—to say nothing of practice at the level at which highly competent specialists in fields like environmental law requires.

To be sure, these criticisms are not new. Judge Jerome Frank famously authored two law review articles, one in the late 1930s and the other in the 1940s,²² lampooning the traditional Langdellian method of teaching for its focus on learning law as a science. More recently, Judge Harry T. Edwards, who had also been on the faculties of both Michigan and Harvard law schools, lamented the growing divide between law schools, the bar and bench, and its associated harm to the profession.²³ Whether these specific criticisms hold true for the teaching of environmental law, I have not seen fully discussed, but I would like to address a slightly different question, namely: In light of the scope of environmental problems that we face, the rapidity of change, and the fundamental uncertainty that continues to define environmental law, what should we be doing to equip aspirant environmental lawyers?

A. *A Few Whats (and Whys)*

As I noted earlier, this is not the first effort to define what to teach aspirant environmental lawyers.²⁴ But, unlike some of those articles, when I am talking about *what* we need to teach our students, I am by and large not referring to the specific courses to teach or the specific doctrine

21. Katherine Mangan, *A Plea for Real-World Training in Law Schools: Carnegie Foundation report suggests more focus on clients, less on Socratic dialogues*, THE CHRONICLE OF HIGHER EDUCATION (Jan. 19, 2007) (quoting Lee S. Shulman, President of the Carnegie Foundation and one of the Carnegie Report's Authors), available at <http://chronicle.com/weekly/v53/i20/20a00601.htm> (last visited Sept. 3, 2007); see also Carnegie Report, *supra* note 5, at 12 (noting the “increasingly urgent need to bridge the gap between analytical and practical knowledge, as well as the demand for more robust professional integrity”).

22. Jerome Frank, *Why Not a Clinical Lawyer-School?*, 81 PENN L. REV. 907 (1933); Jerome Frank, *A Plea For Lawyer Schools*, 56 YALE L.J. 1303 (1947).

23. Harry T. Edwards, *The Growing Disjunction Between Legal Education and the Legal Profession*, 91 MICH. L. REV. 34 (1992); see also Symposium: Legal Education in an Era of Change, 1987 DUKE L.J. 191 (1987); MacCrate Report, *supra* note 12; Tarlock, *supra* note 11, at 299–300 (stating “it is time to reject the Langdellian case method as the principal form of instruction in this area.”).

24. See *supra* notes 8–11 and accompanying text.

that we need to inculcate. Others have plowed that ground. Similarly, there are any number of articles, reports and books that provide lists of competencies that a graduating attorney should have before graduation.²⁵ I see little value in trying to best those lists here, nor can I discuss such lists of competencies in detail in this short essay. For purposes of this piece, I hope instead to quickly reach some common ground and focus on some larger themes that our honoree, Bill Rodgers, embodies. I expect, for example, that we all want to teach and graduate students with the capacity to help solve the problems of our day. I am not sure whether that tells us much. Others might say that we need to train “excellent” or “outstanding” lawyers. But, as cognitive and learning theory confirms,²⁶ being an excellent lawyer cannot be reduced to a single measure. So, what shorthand might we use to help us discuss the measures that define the “expert”?

Traditionally, we might start with definitions that include the ability to read carefully, “to reason in and about the law,”²⁷ and work collaboratively and effectively in a professional legal setting. To that we might add to “know the function of law” and its operation, to act “with diligence, with deliberateness” and with professionalism.²⁸ Perhaps we

25. See, e.g., MacCrate Report, *supra* note 12; Best Practices Report, *supra* note 6 at 39–90 (esp. 51–54).

26. See, e.g., MULTIPLE INTELLIGENCE THEORY: HOWARD GARDINER FRAMES OF MIND (1983) (arguing that IQ is a combination of seven basic intelligences); Carnegie Report, *supra* note 5, at 42, 95–96 (discussing cognitive sciences and describing “new knowledge about how human beings think and learn”); Best Practices Report, *supra* note 6, at 167 (explaining that “[t]here are three domains of learning, and students who are being educated experientially are involved in all three:” “the cognitive,” “the psychomotor or performance,” and the “affective or feeling”).

27. Leon E. Trakman, *What's at Stake: An Educator's Perspective*, in PROFESSIONAL COMPETENCE AND THE LAW 3 (1981) Dalhousie Continuing Legal Education Series, No. 21 (Leon Trakman ed.).

28. *Id.* at 3, 4. “Professionalism” would include the ability to be self-aware and self reflective and to understand the moral and ethical dimensions of practice to deal with morally complex issues. See Carnegie Report, *supra* note 5, at 85, 127–29. See also Wash. State Ct. A.P.R. 11 Reg. 101(n) (defining professionalism as “no more, and no less, than conducting one’s self at all times in such a manner as to demonstrate complete candor, honesty, courtesy and avoidance of unnecessary conflict in all relationships with clients, associates, courts and the general public. It is the personification of the accepted standard that a lawyer’s word is his or her bond. . . . It encompasses the fundamental belief that a lawyer’s primary obligation is to serve his or her clients’ interests faithfully and completely, with compensation only as a secondary concern, acknowledging the need for balance between the role of advocate and the role of an officer of the court, and with ultimate justice at a reasonable cost as the final goal. The area of professionalism shall include the issues of and training in diversity, anti-bias and substance abuse training in order to improve public confidence in the legal profession and make lawyers more aware of their ethical and professional responsibilities.”) *also cited in* Best Practices Report, *supra* note 6, at 80.

can also add elements of the pragmatic. Professor Gary Blasi helped define such expertise using the following example: when “faced with a personal matter of grave importance, to what sort of lawyer does a sophisticated client (including a law student or law professor) turn for representation? . . . [T]hey turn to experienced lawyers—lawyers seen as having sound judgment, able to offer wise counsel in solving complex problems.”²⁹ A common theme, he observed, is the “[a]bility to integrate factual and legal knowledge and to exercise good judgment in light of that integrated understanding.”³⁰ That seems like a reasonable starting place—to be able to problem solve in uncertain situations, using expertise in the law, as it has just been defined.

The question then, is whether environmental law, and in particular the types of challenges presented by issues like climate change, require any reworking of such a general definition of “expertise”? Howard Latin, a speaker at this conference, has written that environmental law “must recognize and accommodate a broader range of legally-protected interests than any other field of law.”³¹ As Howard points out, environmental law as a field has “inappropriate” and difficult to manage temporal and political boundaries, and is “among the most disputatious of legal fields” due to the “shifting perceptions from relative abundance to relative scarcity,” where “pervasive complexity and uncertainty are the norm.”³² Holly Doremus, in her contribution to this symposium, has also singled out uncertainty as a defining characteristic of environmental law.³³ What, if anything, do these descriptions of environmental law add to help us define the type of lawyer that we are hoping to be preparing?

In an important sense, the descriptions of the environmental law field themselves provide the answer to the question of what type of lawyers

29. Gary L. Blasi, *What Lawyers Know: Lawyering Expertise, Cognitive Science and the Functions of Theory*, 45 J. LEGAL EDUC. 313, 314, 326 (1995).

30. *Id.* at 326. The Carnegie Report, *supra* note 5, at 85 strikes a similar note stating: “[i]n actual professional practice, it is often not the particular knowledge or special skill of the lawyer or physician that is critical, important as these are. At moments when judgment is at a premium, when the practitioner is called on to intervene with integrity for the values of the profession, it is the quality of the individual’s formation that is at issue.”

31. Howard Latin, *Fundamental Dilemmas Of Environmental Law* (2002), available at <http://www2.hawaii.edu/~jarman/dilemma.htm>.

32. *Id.*

33. Holly Doremus, *Precaution, Science, and Learning While Doing in Natural Resource Management*, 82 Wash. L. Rev. 547, 547 (2007); see also Plater, *supra* note *, at 388 (1999) (writing about the “chronic role of uncertainty”) (emphasis included); Sax, *supra* note 8, at 10,251 (describing “statutes of numbing complexity and detail”).

we hope to prepare: we need to be preparing lawyers who are competent to effectively help address and resolve issues with “pervasive complexity and uncertainty.” Thus, in addition to being able to do all of the things that all highly competent lawyers must be able to do, environmental lawyers must also possess the ability to comprehend and help provide solutions for multi-scalar, highly uncertain, non-linear problems. This, of course, suggests any number of other traits, characteristics, skills and competencies. And here again, we could create a laundry list of skills, traits, and competencies, nearly each of which could warrant its own law review article and discussion.³⁴ Rather than start down that road, I want to zero in on a handful of *whats* that are particularly pertinent to problem solving in our field, and which we can see so clearly exhibited in our honoree, Professor Bill Rodgers. They are: passion, creativity, knowledge and reasoning in the law, and breadth of mind.

1. *Passion*

I start with passion because if I were forced to point to only one characteristic that helps to explain the Bill Rodgers that I see on a daily basis (and the characteristic most clearly associated with the majority of successful lawyers that I know), I would be hard pressed not to point to passion. Bill’s passion for the law, for using the law to accomplish purposes that help people and the natural world,³⁵ and for learning, is palpable in all he does. It is evident in his writing, in his teaching and in his commitment to those he cares about. How else could one explain nearly 100 articles, fourteen books, continued engagement after forty years, the hordes of followers and acolytes, and his contagious sense of optimism and empathy? His passion stands in sharp contrast to the “cool stance of detached criticism”³⁶ so common in legal pedagogy. Who

34. Those who question the statement need only look at the references cited in the Carnegie Report, *supra* note 5, at 22; the Best Practices Report, *supra* note 6; or the bibliographies for the journals focused on Legal Education and Clinical Legal Education, *see, e.g.*, J.P. Ogilvy with Karen Czapanskiy, *Clinical Legal Education: An Annotated Bibliography (Revised 2005)*, available at <http://faculty.cua.edu/ogilvy/Biblio05clr.htm>.

35. Professor Bob Siebel recently wrote that passion for law “rests almost totally on using law for people of purposes that help people, and for achieving integration of personal and professional values.” Posting of Professor Bob Seibel to LawClinic listserv (Oct. 28, 2006) (on file with author); *see also* Deborah Maranville, *Infusing Passion and Context into the Traditional Law Curriculum Through Experiential Learning*, 51 J. LEG. EDUC. 51 (2001).

36. Carnegie Report, *supra* note 5, at 5.

would not wish these “Rodgerian” qualities (to borrow a phrase from David Getches³⁷) for our students and graduates?

2. *Creativity*

A close cousin of passion, and an essential element for problem solving, especially in novel areas, is creativity. I am not at all sure whether law school can teach or enhance creativity—which is an interesting question well beyond the scope of this essay.³⁸ But, I am quite certain that law school has the potential to diminish, if not entirely extinguish, one’s creativity. Through unbalanced focus on analytical reasoning and precedent, largely detached from the facts of cases, let alone how facts and theories were developed—the beginning law student learns through explicit and implicit cues that creativity is not a focus, nor a particularly valued “skill.”³⁹ To the uninitiated, arguments arise inexorably as a result of the “right” legal research, perhaps the addition of a little critical thinking and of course, the application of the facts to the law found.

Consider as an example the recent case of *Massachusetts v. EPA*,⁴⁰ involving the question of whether EPA properly denied a petition to regulate carbon dioxide and other green house gas (GHG) emissions from automobiles as air pollutants. Some time early next academic year, students in an administrative law or a constitutional law class will be asked to read *Massachusetts* in connection with a unit on standing. In class, the students will be grilled on the nuances of Justice Kennedy’s concurrence in *Lujan v. Defenders of Wildlife*,⁴¹ its relation to the majority opinion in *Massachusetts*, the Chief Justice’s dissent and the strengths and weaknesses underlying the arguments concerning states’ special solicitude. It will all be terrifically analytical and rigorous, and it will require close reading of texts, the comparison of precedents, some synthesis of and comprehension of the standing doctrine, and perhaps even some speculation into small “p” politics. All of this would be

37. Dean David Getches coined the phrase “Rodgerian logic” during his opening remarks at this conference.

38. See, e.g., Carrie Menkel-Meadow, *Aha? Is Creativity Possible in Problem Solving and Teachable in Legal Education*, 6 HARV. NEGOT. L. REV. 97 (2001); David R. Culp, *Law School: A Mortuary for Poets and Moral Reason*, 16 CAMPBELL L. REV. 61 (1994).

39. See Carnegie Report, *supra* note 5, at 50–58.

40. ___ U.S. ___, 127 S. Ct 1438 (2007).

41. 504 U.S. 555, 579 (1992) (Kennedy, J., concurring).

perfectly within the norms of teaching, and oh, what a shame that will be. What a lost opportunity for the students involved.

Imagine how much richer the learning experience for the students would be to have the background narrative; to read Professor Lisa Herzerling's brilliant briefing; to discuss the creative decisions regarding how the matter was pled, briefed, supported, and argued at each level; to engage the students in a role play in which they are asked to assume the role of counsel for a large GHG emitter fielding the inevitable call from the client, or the counsel for a wind-turbine manufacturer fielding a similar client call. Or perhaps the student is a top adviser to Senator Barbara Boxer, and is being asked what to do next? Now that is a chance to really engage in the "case" method.

As Bill Rodgers has written, creativity comes in many forms.⁴² He himself is a remarkably creative lawyer and scholar. In writing two articles celebrating the "most creative moments in the history of environmental law,"⁴³ Bill has helped us to understand creativity. He has written that a creative moment is "a legal initiative that advances environmental law with a new level of analysis, new structure, or new institutional bridge."⁴⁴ Bill's writings and practice demonstrate creativity on a number of levels. He is prolific and insightful. He brings to others the best of the academy—from the stunning reach of his treatises, to his disarming analogies to nature and other domains that help us understand ourselves and our legal system, to the off-the-wall and arresting pictures and movie clips for which he is legendary. Bill asks questions and writes in ways that expand domains of thought and of law into new areas.⁴⁵ His creativity is constantly on display for all—including, perhaps most importantly, his students—to see. This symposium provides firsthand accounts of many other creative moments that ought to inspire us:

42. See Rodgers, *The Whats*, *supra* note *; Rodgers, *The Whos*, *supra* note *.

43. *Id.* Not surprisingly, the *whos* of Bill's pantheon of creativity include several at the conference including Oliver Houck, John Bonine, Howard Latin, and Mickey Gendler. Likewise, included among *whats* was Dean David Getches' (who opened this conference) idea of putting an "environmental claim" claim into the complaint in *United States v. Washington* (Boldt Phase I), a feat that Bill identified as one of the greatest "Aha!" moments in environmental law history.

44. See Rodgers, *The Whats*, *supra* note *; Rodgers, *The Whos*, *supra* note *, at 1 ("Law is better if it increases the prospect of protecting the natural world or its inhabitants. Law is novel if it combines mandate, process or structure in unusual ways.").

45. See also Howard Gardner, INTELLIGENCE REFRAMED: MULTIPLE INTELLIGENCES FOR THE 21ST CENTURY 116–19 (1999). Alternative descriptions of creativity and creative moments certainly exist, see, e.g., Menkel-Meadow, *supra* note 38, at 113–14, but Professor Rodgers' description is quite appropriate for the purposes of this discussion.

Michael Axline's creativity (and hard work) that put the common law and products liability theories to work on behalf of Big Water,⁴⁶ Professor A. Dan Tarlock's cutting edge work at the intersection of environmental law and land use,⁴⁷ and Patti Goldman's work on endangered species protection and pesticides, to name but three. Surely, we'd agree that such creativity is yet another "Rodgerian" quality that we hope to pass along to our students.

Before leaving creativity, I want to at least mention persistence—the ability to stick with an issue or problem and to maintain action or press on without being distracted or losing focus of mission. It has to do with the plain hard work that is required to see the fruits of creative thinking and the results of effective problem solving, and the persistence of vision that helps to bear the creative fruits. All too often, I am afraid, we forget to mention this most basic of qualities that so often makes the difference between the development of the most creative ideas and the implementation of those ideas.⁴⁸ This is one of the few areas thus far, however, that that I think the law school experience provides a perception that is somewhat helpful.

3. *Knowledge and Reasoning in Law*

We all expect effective problem solvers, lawyers who will be capable of handling the most vexing environmental problems of our day, to be knowledgeable in the law and its application. They should possess keen analytical ability, the ability to reason in the law and to understand legal systems and legal history. Such experts ought to be able to quickly place issues in context and reason through them.

It is no surprise, therefore, that knowledge and reasoning are qualities that again tie to our honoree. Often noted for his near encyclopedic knowledge of our field, Bill's breadth and depth of knowledge in environmental law need take a back seat to no one. With respect to the question of teaching and the *whats*, we have but three years in law school and there are dozens upon dozens of significant federal statutes, any one of which could tie a semester class in knots. Even a collection of

46. Big Water is the term that Michael Axline used to describe his clients (including water purveyors and municipalities), who have been injured by Big Oil.

47. Rodgers, *The Whos*, *supra* note *, at 27 n.196 (noting that Professor Tarlock has "published at least thirty articles on environmental and land use topics. He has the reputation of the most prolific of environmental law scholars.").

48. *See also id.* at 25–26.

only the basic statutes and their regulations extends well beyond any one student's ability to know with detail. So *what* to do? This is a familiar conundrum, one that others more experienced than I have tried to tackle. My suggestion is rather modest in this regard: we abandon entirely the effort to impart "encyclopedic" knowledge to our students. Thankfully for our students we have Bill's treatise in Environmental Law,⁴⁹ John Leshy's in Natural Resources,⁵⁰ and others. Our students should be made aware of these resources and convinced of their value. But, given the limited time that students are in law school and the limited time within the three years that students have to study and learn about environmental law, I fall on the side of those that argue that it is largely beyond our capacity, and should be beyond our expectations, to teach environmental law soup to nuts. The field is simply too large, too sprawling,⁵¹ and too complex. And, there are of course other substantive areas of law, concepts, and skills to learn.

Beyond developing the capacity to reason in and about the law, and developing an understanding about the systems within which our laws operate, a few additional (if modest) *whats* include developing an understanding of: the history of our field, the challenges that the issues present, the different regulatory approaches available and those taken, the systems and structure of environmental laws, statutory interpretation, and the role and history of common law.⁵² The *whats* should also include, in my view, basic knowledge and exposure to areas that often do not make the lists of *whats* for environmental lawyers such as: logic,⁵³ finance, economics and accounting. Also at the top of my list would be the law of corporations. Indeed, in the short term we very much need creative and knowledgeable lawyers who understand the

49. WILLIAM H. RODGERS, JR., TREATISE ON ENVIRONMENTAL LAW (West Publishing Company 1986).

50. GEORGE CAMERON COGGINS, CHARLES F. WILKERSON & JOHN D. LESHY, FEDERAL PUBLIC LAND AND RESOURCES LAW (5th ed. 2002).

51. See Plater, *supra* note *, at 359 (explaining that the "vast sprawl of the environmental law field makes it a bemusing and confounding puzzle . . .").

52. The structure we have here at the University of Washington provides a good model. We have first level survey courses in pollution control, public lands, water law, land use, and ocean and coastal law. These are "followed" by a series of seminar and deep dives addressing a wide array of topics that vary from year to year, as well as the environmental law clinic. Students may also take a number of classes in other University departments and schools, pursue joint degrees, or obtain law school credit while externing with any one of a large number of environmental NGOs, tribes, or other governmental entities.

53. See Ruggero Aldisert, LOGIC FOR LAWYERS: A GUIDE TO CLEAR LEGAL THINKING (1997).

capital markets, as well as finance and corporate behavior, in order to help us develop and deploy the technology necessary to radically reduce GHG emissions. Moreover, given that tax and risk allocation are among the main factors driving decisions, we ought to be encouraging our students to gain exposure to these topics as well. While we are talking about fields of exposure, we should not forget the behavioral and biological sciences' insights into negotiations, decision-making, and game theory. Finally, in addition to understanding the systems and structures of our legal system, our students need to be introduced to international law, including the principles, structures, actions, impacts and dynamics involved in globalization.⁵⁴

4. *Interdisciplinary Knowledge and Breadth of Mind*

In thinking about the uncertainties and interdisciplinarity that help to define the field of environmental law, it should come as no surprise that breadth of mind, an understanding and awareness of ideas and ways of thinking in other disciplines and fields, including other fields of law, would be a key element to expert problem solving. Professor Tarlock, one of the contributors to this symposium, has previously written about the importance of such interdisciplinary approaches, concisely capturing the concept when in 1970 he wrote, "persons trained in one discipline with the ability to synthesize and apply the insights of related fields are needed for future decision-making."⁵⁵

As practicing environmental lawyers will confirm, environmental lawyers almost always work on matters as part of an interdisciplinary team.⁵⁶ Whether the problem relates to cleanup, water law, forestry issues, endangered species, toxic exposures, or analyzing reports underlying transactions, lawyers routinely work with experts in other fields.⁵⁷ It is essential that we expose our students to this reality of practice.

54. See Adelle Blackett, *Globalization and Its Ambiguities: Implications for Law School Curricular Reform*, 37 COLUM. J. TRANSNAT'L L. 57 (1998).

55. Tarlock, *supra* note 11, at 336; see also *id.* at 323–26 (discussing the then-emerging environmental law curriculum, noting that "the teaching profession has long been dissatisfied with the efficacy of our mode of classroom teaching," and citing *inter alia* the 1944 Committee on Curriculum of the Association of American Law Schools, *The Place of Skills in the Legal Education*, 45 COLUM. L. REV. 345, 388 (1945)).

56. See, e.g., J.B. Ruhl, *Malpractice and Environmental Law: Should Environmental Law "Specialists" Be Worried?*, 33 HOUS. L. REV. 173, 190 (1996).

57. *Id.*; see also Percival, *supra* note 10, at 7–8, 36.

By now, the connections to Bill Rodgers are obvious. Long before interdisciplinary work was a favored term, Bill was living it. He was bringing it back to us in his writings and teaching. He has colleagues and friends in all parts of the University of Washington campus with whom he has worked and collaborated—and whose works he has shared with us. Bill's ability and desire to think expansively is a model for the next generation to emulate. The authors of the *Carnegie Report* recount that students must be urged “to think expansively” and to draw on more than just their legal knowledge to solve problems,⁵⁸ but to “draw on the extra-legal dimensions of the problem.”⁵⁹ I can think of few legal scholars who are better role models in this regard, than our colleague Bill Rodgers.

Two additional aspects of breath of mind worthy of emphasis include: one's receptiveness to new ideas and different ways of thinking about an issue and one's willingness to question orthodoxy. These too are “Rodgerian” qualities that we should strive to pass along to our students.

So, there you have it: a short list of *whats* calling for passionate and creative lawyers with breath of mind, knowledge of their field and craft, and the determination, focus, and skills to help solve environmental problems of increased scope and uncertainty. It is a beginning step, the outline for a sketch of some of the basic qualities that we should want to see in our students, and that we see exhibited daily by our colleague Bill Rodgers.

B. *A Few Hows*

I will not spend much time addressing the *hows* in the way that several other papers do, namely with a discussion of the continuing tensions that exist between the case-dialogue method and more problem-based methods, the value and viability of survey classes rather than classes more finely focused on a statute or group of statutes, and the division between the portion of environmental law focused on pollution control and the portion of environmental law that is focused on natural resources. These are all interesting, but also well worn. Instead, I'd like to talk about a few “signature” pedagogies⁶⁰ that I believe offer

58. Carnegie Report, *supra* note 5, at 37.

59. *Id.* at 102.

60. See Carnegie Report, *supra* note 5, at 23–24 (defining signature pedagogy as a key educational practice), 51 (explaining that every signature pedagogy has four dimensions).

significant promise, and are ones that I have been fortunate enough to be a part of, or see employed, here at the University of Washington.

*1. Cross-Disciplinary Integrated Seminars: The “Deep Dives”*⁶¹

As we know, environmental matters do not come as neatly packaged problems, complete with attached labels informing practitioners and policymakers of the appropriate statutory, regulatory, or common law scheme to apply in order to “fix” the problem. Recognizing this, Bill Rodgers, among others in our field,⁶² has taken the seminar to a whole new level. Rather than using upper class seminars or small classes simply to delve more deeply into a single statute or area of law (e.g., a seminar on Hazardous Waste, Toxics, Water Law, or even Ocean and Coastal Law), we’ve seen the development of integrated classes with titles like “Trees,” “Alaska,” “Puget Sound” and “The Duwamish River.”⁶³ Somewhat reminiscent of the books like “Salt,” or “Dirt” (written by one of our conference speakers, David Montgomery), these next-generation seminars introduce students (law and non-law) to environmental law issues through unifying themes organized around such features as geography, a genus, or an ecosystem. Each class requires students to suspend their immediate desire for black letter rules or even a single statute or prepackaged and edited series of cases, in exchange for the delayed gratification associated with a “deep dive” into an issue. The class demands that the students develop an understanding of the many and varied interests and aspects surrounding the resource, geographical region, or ecosystem.

To take just a couple of examples from Bill Rodgers’ recent seminars, think of the palette of issues from which to select in a seminar titled “Trees” or “The Duwamish River.” In “Trees,” there are, of course, the familiar legal histories addressing the history of the withdrawal of lands from the public domain, the development of the forest reserves, the legal

61. Professor Richard Lazarus, a contributor to this symposium, *see* Richard Lazarus, *Bill Rodgers: Environmental Law’s Captain Planet*, 82 Wash. L. Rev. 493 (2007), previously used the term “deep dives” to describe taking a class on an in depth examination of “specific regulations to give students a sense of the technical depth as well as the breadth of the field.” Plater, *supra* note *, at 361–62, n.5. I am using the term somewhat differently in this article.

62. *See also* Sax, *supra* note 8, at 10,252 (describing similar classes that he teaches and that Professor Charles Wilkinson teaches).

63. *Compare* Tarlock, *supra* note 11, at 326–328 (discussing the emergence of specialized seminars addressing environmental quality including Professor Bill Rodgers’ seminar on Environmental Protection at the University of Washington in 1969–1970).

framework from the creative⁶⁴ and organic⁶⁵ acts through the Multiple-Use Sustained-Yield Act⁶⁶ (MUSYA) and the National Forest Management Act (NFMA).⁶⁷ But there are other important narratives as well—the historical, cultural, economic, and scientific. The seminar can delve into discussions of forest health, biodiversity, endangered and threatened species, fire, invasive species, trade and climate change. A course like “Trees” can provide a platform for the instructor to talk about the suburban/rural interface, land use, growth management and zoning, urban agriculture and design. In the “Duwamish River” course, imagine the level of learning that can take place when instead of learning environmental laws in nicely packaged parcels, the students go to the Duwamish River, and learn about the myriad of issues associated with this nearby industrial waterway that flows into Elliott Bay. Whether looking at it from the perspective of endangered salmon runs, subsistence fishing, development, cleanup, land use and zoning, dredging for shipping, or urban planning, the students cannot help but learn about the complexity in the various federal and state laws, the interactions of these laws with the various private actors and stakeholders, and the role that science and politics play. This learning takes place in ways that cannot be found by reading a series of carefully edited cases that often stand at odds with statutes as they are written.

Deep diving seminars of this type also provide opportunities for law professors to engage and involve colleagues from other disciplines on our campuses. To return to “Trees,” we can reach out to our colleagues in the schools of forestry and horticulture, biology and urban design, business and philosophy. Students can also be introduced to the stakeholders on multiple sides and to narratives that casebooks simply cannot approach. Students not only learn the traditional doctrine, but learn firsthand the gaps, overlaps, and inconsistencies in the law’s application. Students have the opportunity to meet with and hear from the lawyers who were involved in matters like the spotted owl litigation, or who handle state law forest issues while running a public interest law firm. They hear about the trials and tribulations of litigation, the importance and role of creative problem solving; they learn to build

64. Act of Mar. 3, 1891, ch. 561, 26 Stat. 1095, 1103, *repealed by* 90 Stat. 2792 (1976).

65. Act of June 4, 1897, ch. 2, 30 Stat. 34 (codified as amended at 16 U.S.C. §§ 473–482).

66. 16 U.S.C. §§ 528–531 (2000).

67. Pub. L. No. 94-588, 90 Stat. 2949 (1976) (as amended, 16 U.S.C. § 1600 *et seq.*).

complex narratives and are exposed to the results of the not so creative, the failures, and the downright harmful.

Students are asked to grapple with and present on areas of reading throughout the class, and as they work on papers and presentations together, they engage the subjects more deeply and with more motivation than before. After such a deep dive the students are more ecologically, legally, and environmentally literate—they have a better sense for the connection of the legal issues to the social, political, ecological and other issues,⁶⁸ and they have a much keener sense of both legal history and the applicable law. And, if I am very lucky, after the “deep dive,” some of the students will join my Clinic, or if not, they head off to practice as young lawyers much better prepared to help solve and address environmental problems.

2. *Experiential Learning*

Experiential learning, as the term suggests, places students in the roles in which they experience, either firsthand or as a close observer, the practice of law to guide their learning.⁶⁹ Students learn professional knowledge, doctrine, patterns of reasoning, skills, and the exercise of judgment, all “in role.” When the method is practiced well, it helps to serve as a necessary bridge between theory and practice.⁷⁰ The authors of the *Carnegie Report*, to which I referred earlier, concluded that experiential courses are essential for the development of law students in their development toward professional competence.⁷¹ The *Best Practices Report* thesis is similar: “[I]aw schools cannot help students cultivate practical wisdom or judgment unless they give students opportunities to engage in legal problem-solving activities.”⁷²

That is not to say that any experience is sufficient. We know better; as Barry Law has explained, we must “move beyond the practice based on over simplistic observations that ‘you can always learn from experience’

68. See Connolly, *supra* note 11.

69. Best Practices Report *supra* note 6, at 165–67.

70. See Carnegie Report, *supra* note 5, at 96–99 (noting that clinics can help to fuse two modes of thinking: the analytic or paradigmatic and the theory of thinking based on the narrative).

71. *Id.* at 95–125, 194–202.

72. Best Practices Report, *supra* note 6, at 149; See Carnegie Report, *supra* note 5, at 95 (quoting from an earlier version of the Best Practices Report, “students cannot become effective problem solvers unless they have opportunities to engage in problem solving in hypothetical or real legal contexts.”).

etc. and look more carefully at the preconditions for experiential learning.”⁷³ Examining these “preconditions” is essential if we are to both achieve our goals and be taken more seriously by the still not insignificant numbers of our colleagues who see the use of experiential learning as something “less than” the proper role of a law school. Experiential learning comes in many different forms, and I will address only two in any detail: (1) case studies and simulations and (2) clinics.

a. *Case Studies and Simulations*

Simulations, as we know from other fields, and some work in law, can provide an efficient and effective method of integrating doctrinal learning and theory with skills and values-oriented learning. “A case study is a narrative that recounts the factual history of an event or series of events. It is typically used as the basis for in-class analysis and discussion.”⁷⁴ If prepared properly, case studies and simulations can provide students and professors with controlled, scalable interactions and experiences, with well-defined learning objectives. They can allow professors to set the pace of the interaction in a way that is not possible in real-client situations and to establish fact patterns and experiences closely tailored to a specific learning objective or set of objectives. For example, a case study or simulation can be constructed to help students learn substantive law, through engagement in context, or to develop a very specific skill in a somewhat “safer” environment than a live clinic might provide. As a very simple example, simulations can be constructed to require team lawyering experiences. As many others have pointed out, and those of you who practice law can attest, the opportunities for teamwork in law school are few and far between, while the demand for teamwork in practice is near constant. Simulations, along with other experiential learning opportunities, allow us to encourage students to practice teamwork.

73. Barry Law, Doctoral Thesis, *Experiential Education as a Best Practice Pedagogy for Environmental Education in Teacher Education*, at 18 (May 2003) (unpublished Ph.D. dissertation, Griffith University) (on file with, Australian Env'tl. Studies, Faculty of Env'tl. Sciences, Griffith University (May 2003) (internal citation omitted); *see also* Best Practices Report, *supra* note 6, at 143 (explaining that “[s]imply providing opportunities to engage in problem-solving activities is not enough.”).

74. Stanford Law School Case Studies Collection Frequently Asked Questions, *available at* <http://www.law.stanford.edu/publications/casestudies/faq/> (last visited Sept. 3, 2007).

Teaching Environmental Law in the Era of Climate Change

In environmental law, we are fortunate to already have a great start on case study materials and simulations. The Stanford Law School Case Studies Collection⁷⁵ provides an impressive start for anyone interested in using case studies and interactive simulations “that place students in the roles of lawyers and policy makers and teach fundamental lawyering skills such as investigating facts, counseling, and resolving ethical dilemmas.”⁷⁶ These simulations are already vetted, packaged and ready to use for anyone interested, and they are also easily embellished, edited, and modified to a professor’s liking. I have used several of Stanford’s case studies and simulations with good student response and much better student engagement and results than other more traditional materials. As such, simulations can provide unique opportunities for learning, and also act as a bridge from the doctrine in case books to the real life experiences that clinics provide. Simulations can also be used to provide opportunities for students to draft legislation, submit administrative comments, or negotiate a settlement of a simple or complex matter.

b. The Clinical Experience

Clinics are, in very broad terms, classes in which students bring their talents to bear on behalf of real clients, on real matters, while under the direct supervision of faculty members. The University of Washington has eleven such “in-house” clinics, all of which operate together as a single law firm. The law firm has approximately a dozen faculty member directors (the firm’s senior partners), a handful of fellows (mid-level associates or junior partners), and over the course of an academic year more than 100 law students (some of whom are eligible to represent clients in court).⁷⁷

Clinics, as you can tell from the above description, offer a model of teaching and learning that is distinct from the Langdellian case method model with its focus on appellate cases, highly-edited and prepackaged in easily digestible formats, and book learning.⁷⁸ Clinics allow students,

75. Stanford Law School Case Studies Collection, available at <http://www.law.stanford.edu/publications/casestudies> (last visited Sept. 3, 2007).

76. *Id.*

77. WSBA, Admission to Practice Rules, Rule 9: Legal Interns (allowing for student practice).

78. The MacCrate Report, *supra* note 12, included a Statement of Fundamental Lawyering Skills and Professional Values including problem solving, legal analysis and reasoning, legal research, factual investigation, communication, counseling, negotiation, litigation and alternative dispute resolution, procedures, organization and management of legal work, and resolution of ethical

as Judge Jerome Frank put it more than a half century ago, to “learn by ‘doing’, not merely by reading and talking about things.”⁷⁹ Of course, the theory behind experiential learning is more than just the idea that students learn from any practice experience. Were that the case, we might as well just send them into practice unaware or send them through a series of unstructured, unsupervised externships or internships.⁸⁰ Clinics and other good forms of experiential learning help to establish the preconditions and set the groundwork for learning. Clinics teach learning in context and allow for the students to see the “theory in action” (or “theory in practice” as some prefer).

Particularly appropriate for the field of environmental law, clinics provide models for students to learn to develop “modes of planning and analysis for dealing with unstructured situations” and uncertainty.⁸¹ As our colleague, George Critchlow, from east of the Cascade divide has written: “[t]he purpose of clinical student practice, in addition to technical skills training, is to provide students with an opportunity to develop sound and independent legal judgment, including good moral judgment.”⁸² Associated with these purposes, but perhaps among the most important, clinics provide a unique laboratory setting to develop problem-solving, decision-making, and ethical judgment that goes well beyond the critical analysis and legal reasoning that are also fundamental to competent lawyering.

At their best, clinics provide conditions for active engaged learning,⁸³ including opportunities for emulation and participation as well as necessary foundations in doctrine and skills. Clinics provide coaching,

dilemmas. In 1992 the AALS Committee on the Future of the In-House Clinic identified nine goals for clinical education. *Report of the Committee on the Future of the In-house Clinic*, 42 J. LEGAL EDUC. 508, 511–17 (1992) [hereinafter 1992 In-House Report].

79. Frank, *supra* note 22, at 1320.

80. See Lawrence K. Hellman, *The Effect of Law Office Work on the Formation of Law Students' Professional Values: Observation, Explanation, Optimization*, 4 GEO. J. LEGAL ETHICS 537 (1991) (providing a critique of some of the issues that can be associated with practice externships).

81. 1992 In-House Report.

82. George Critchlow, *Professional Responsibility, Student Practice, and the Clinical Teacher's Duty to Intervene*, 26 GONZ. L. REV. 415, 429 (1990–91); For best practices, see Best Practices Report, *supra* note 6.

83. Best Practices Report, *supra* note 6, at 124, 153–57; Gerald F. Hess, *Seven Principles for Good Practice in Legal Education: Principle 3: Good Practice Encourages Active Learning*, 49 J. LEGAL EDUC. 401, 402 (1999) (noting “active learning is more than a set of techniques. It is also an orientation on the part of the students and the teachers . . . [it] proceeds from the assumption that students learn best when they take responsibility for their own education.”).

encouragement, structure and bridges between theory and practice for the aspiring lawyer to represent a client's interests. Clinics offer opportunities for collaboration, feedback, critique, review, teaching, intervention, mentoring and inspiration in ways that are distinct from the usual classroom experience, or many alternative practice experiences. Clinics can provide students with an environment that requires them to move back and forth between experience and reflection, doctrine and application of doctrine, and synthesis of experiences and learning. They can also encourage the development of "analytically sophisticated approaches to practice situations."⁸⁴

Of course, like the Langdellian method, the clinical method can be performed well or badly. Reflection alone is unlikely to be very helpful. Mistakes repeated over and over are unlikely to lead to learning.⁸⁵ Bad communication between faculty members and students is unlikely to lead to the results desired. And, like all methods, there is debate even among its practitioners and adherents regarding the best methods, practices, and even its goals.⁸⁶

At their best, clinics can also be incubators for many of the learning goals outlined above—passion, knowledge, creativity, analytical reasoning, and inculcation of skills and professionalism being chief among them.⁸⁷ An additional value that is undervalued, perhaps as a result of the history of clinical education and much of the writing about pedagogy and development of expertise, is the amount of substantive learning about environmental law that can take place in an environmental clinic. In my experience, the amount and degree of substantive and doctrinal learning taking place in the clinic is greater than that provided in the survey courses, and arguably even the deeper

84. Carnegie Report, *supra* note 5, at 11.

85. William Berman provides information for those interested in the role of human error and mistakes as they relate to clinical learning. See William Berman, *When Will they Ever Learn? Learning and Teaching from Mistakes in the Clinical Context*, 13 CLINICAL L. REV. 114 (2006).

86. Brook K. Baker provides a provocative, if somewhat unconventional, look at these issues. See Brook K. Baker, *Learning to Fish, Fishing to Learn: Guided Participation in the Interpersonal Ecology of Practice*, 6 CLINICAL L. REV. 1 (1999). Gary Blasi discusses some of the cognitive bases of clinical education. See Gary L. Blasi, *What Lawyers Know: Lawyering Expertise, Cognitive Science, and the Functions of Theory*, 45 J. LEGAL EDUC. 313 (1995).

87. See Carnegie Report, *supra* note 5, at 160 (asserting that "clinics can be key settings in which students learn to integrate not only knowledge and skill but the cognitive, practical, and ethical-social facets of lawyering as well. The experience of clinical legal education, . . . points toward actual experience with clients as an essential catalyst for the full development of ethical engagement.") (internal citations omitted).

dives in specialized seminars or simulation classes that I've previously discussed. Moreover, the depth of understanding, and the ability to apply that understanding is unparalleled. In support of these statements, I offer a couple of examples from the University of Washington's Berman Environmental Law Clinic just this year. The first involves two relatively straightforward statutes, the National Environmental Policy Act⁸⁸ (NEPA) and its state counterpart, Washington's State Environmental Policy Act⁸⁹ (SEPA), and their application as part of a client's larger programmatic interests in a particular industry. A team of students started off with initial client meetings in which they had to identify the client's overall goals, specific objectives, and the actions currently under review.⁹⁰ The students then set off to review the applicable draft Environmental Impact Statement (DEIS), which was several hundred pages long, together with additional administrative record materials. They then conducted legal research, based on the issues that they had identified, in order to determine whether the DEIS was legally sufficient. The students worked with relevant experts and the client to understand portions of the DEIS dealing with particularly complex modeling and other scientific issues, developed alternatives and explained why the agency's alternatives were inadequate or insufficient. The students were required to present their findings to the client, and then draft comments for the client's review and ultimate submission to the agency. The students then had multiple opportunities to testify before the agency, to work with other stakeholders and decision-makers, to interact with the client on issues regarding the media, and ultimately to help negotiate a creative resolution that achieved the client's objectives while maintaining a relationship between these repeat players. I am quite certain that the team of students that worked on that project left the matter not only with improved written and oral advocacy skills, but with an enhanced ability to develop facts, analyze legal issues, determine a client's goals and objectives, negotiate a settlement as part of a team, and an enhanced understanding for the institutional structures and policies that led to the conflict and the role of the legal system. They also gained a much better and deeper substantive understanding of NEPA and SEPA.

88. Pub. L. No. 91-190, 83 Stat. 852 (1970) (as amended, at 42 U.S.C. § 4321 *et seq.* (2000)).

89. WASH. REV. CODE ch. 43.21C (2006).

90. This also led to discussions regarding the scope of representation and drafting of a representation agreement.

For those who might suggest that the substantive challenge in NEPA cases is insufficiently rigorous to serve as a particularly good example, I can report similar results from students that, over the course of three years, have worked on different versions of the litigation surrounding the Federal government's challenge to Washington Initiative I-297, the Cleanup Priority Act.⁹¹ Without going into any great detail, the Initiative addresses cleanup and disposal of mixed wastes (*i.e.*, mixed hazardous and radioactive wastes) in Washington State. For anyone familiar with the Resource Conservation and Recovery Act (RCRA) and the world of solid waste, I think you would have to agree that few statutes present more of a challenge. I have no doubt that the by-now several teams of students that have worked on that case, now awaiting final briefing in the Ninth Circuit, came away with a vastly superior and detailed knowledge not only about RCRA and its implementing regulations, but also a deeper and more profound understanding of the Dormant Commerce Clause than students who took advanced classes in either environmental law or constitutional law. Further, that deeper understanding comes not just as the result of having spent more concentrated time on a particular statute or set of issues, although that is certainly the case—but also as the result of learning in context. The students not only learn from their own work, but also from observing how lawyers deal with complex matters involving litigation and problem solving. The students also learn from their clients.⁹² The ownership of a case that comes from representing a real client with substantial interests at stake provides students with the anchor, context, and motivation for substantive learning that is unmatched in law school.

Environmental clinics, depending on their design and goals, can also be incubators of creativity. Some clinics emphasize skills, and these clinics take on small routine cases. We have tended toward the other end of the spectrum, looking for diverse opportunities to expose students to varied problems (litigation, legislation, negotiation, advice and counseling) and a diet of more complex matters. One of the most interesting experiences has been to watch as students work on draft legislation. As one clinic student relayed in a media interview about the clinic recently, it is very easy to critique a statute or regulation. It was,

91. WASH. REV. CODE ch. 70.105E (2006).

92. See Carnegie Report, *supra* note 5, at 102 (noting that “effective counseling depends on the lawyer’s ability to recognize, solicit and use not only his or her own legal knowledge but also the client’s understanding of the extra-legal dimensions”).

according to the student, a much different experience, requiring an entirely different set of skills to draft a new law or regulation. Such work provides our students with additional opportunities to build their legal writing skills and enhance their knowledge of the legislative process. It also provides the professor with an opportunity to reinforce the importance of creativity, knowledge, and reasoning in the law.

The clinical experience provides students with an important window to some of the very different roles that lawyers play in representing their clients. Clinics provide this window in the relatively “safe” atmosphere in which they can commit “first-level” errors while under close supervision and have assistance available, rather than postponing these experiences until the students graduate and begin to practice on their own.⁹³

II. A RESPONSE TO ANTICIPATED CRITIQUES

Given my hope that this article serve as a discussion aimed at answering the questions of what and how we teach, I have intentionally left many issues to be discussed—some I have left intentionally unaddressed and others I have addressed in ways that invite response and criticism. The first and most familiar critique is that my focus on experiential learning suggests that I am discounting or disregarding the importance of doctrine, analytical reasoning and all that “thinking like a lawyer” entails. It should not take long to dispel this notion on a number of levels. First, I disagree with the premise. My comments have been largely directed at the upper class curriculum. The first year or perhaps year and a half will continue to be infused and focused on the skills associated with analytical reasoning, and the mis-termed “thinking like a lawyer.” Like all other skills and knowledge that we teach in law school, the careful reading of texts and the use of analytical reasoning are skills that will continue to develop in our students well after they graduate from law school. The addition of signature pedagogies, like “deep dive” seminars and experiential learning in the second and third years, merely add to the ways in which we can inculcate in students the full range of necessary knowledge, skills, traits, and competencies. The second and

93. Best Practices Report, *supra* note 6, at 182 (quoting from Tony G. Amsterdam, Remarks at Dean’s Workshop, ABA Section of Legal Education and Admission to the Bar, Jan. 23, 1982 (unpublished)); Roy Stuckey, *Teaching With Purpose: Defining and Achieving Desired Outcomes*, 13 CLINICAL L. REV. 807, 826 (2007).

third years will still include many doctrinal classes, and I use⁹⁴ and advocate others using a variety of pedagogical methods in those classes. Further, in each of the signature pedagogies that I've identified, the professors continue to teach, and the students continue to learn, analytical reasoning skills and substantive law—the difference is that they are learning it in context. Finally, the critique against the growth of clinics and other signature pedagogies that I have identified ignores the fact that, as the University of Washington's own Professor Debbie Maranville has described:

Many students are so bored by the second year that their attendance, preparation, and participation decline precipitously; by graduation they have lost much of the passion for justice and enthusiasm for helping other people that were their strongest initial motivations for wanting to become lawyers.⁹⁵

A second critique that has been leveled at clinics, particularly environmental law clinics, is that they push an ideological agenda.⁹⁶ My response again is several-fold. First, my overriding agenda is to produce highly capable problem solvers, who possess the necessary foundations to become experts in their field (environmental law or otherwise). My goal is to provide the necessary foundations for our graduate's continued acquisition of knowledge, skill and judgment, and professionalism. Part of professionalism, I believe, is pursuing the practice of law in service to

94. In addition to directing the environmental law clinic, I also teach administrative law and environmental law. In each of those classes I utilize a modified Socratic method, supplemented with a variety of additional case and background materials and other teaching methods to engage the students and provide additional learning opportunities, including team and individual writing assignments.

95. Deborah Maranville, *Infusing Passion*, *supra* note 35, at 51; *see also* Kramer, *supra* note 7, <http://www.law.stanford.edu/news/pr/47> ("Talk to any lawyer or law school graduate and they will tell you they were increasingly disengaged in their second and third years," Kramer said. "It's because the second and third year curriculum is for the most part repeating what they did in their first year and adds little of intellectual and professional value. They learn more doctrine, which is certainly valuable, but in a way that is inefficient and progressively less useful. The upper years, as presently configured, are a lost opportunity to teach today's lawyers things they need to know. Lawyers need to be educated more broadly—with courses beyond the traditional law school curriculum—if they are to serve their clients and society well."); *see also* Carnegie Report, *supra* note 5, at 77 (referencing a LSSEE report reporting on a drop-off in interest as students move through law school, "[t]hird year students especially reported a significant reduction in the amount of time and effort spent on their academic work compared to earlier years").

96. *See* Robert R. Kuehn, *Shooting The Messenger: The Ethics Of Attacks On Environmental Representation*, 26 HARV. ENVTL. L. REV. 417, 425–31 (2002); *see also* Adam Babich, *The Apolitical Law School Clinic*, 11 CLINICAL L. REV. 447 (2005).

clients and in the spirit of public service.⁹⁷ To the extent that is a political or ideological agenda, I stand guilty as charged.

A third critique, and one to which I plead guilty, is that my proposals do not go far enough; that is, I have not been ambitious enough. In pleading guilty, I point to several mitigating factors; the first is the subject matter of the article and its context. We are here to celebrate Bill Rodgers and I am here to provide a brief overview of the topic. Law school reform, even focused on just environmental law, is a topic that we could devote an entire symposium to and still not exhaust. I have not, for example, even touched on the first year, where one would hope to see both additional curricular reforms and the integration of more opportunities for our students to maintain their interest in environmental law and related issues.⁹⁸ And second, as I have mentioned, this essay is intended to help advance the discussion. It is just a start, not an end point.

Perhaps the most difficult critique to respond to at a public law school like the University of Washington is the expense associated with clinics, seminars, and simulation classes of the type that I've described. There is no doubt that these smaller classes are more expensive than bigger classes.⁹⁹ As some others have noted, to the extent that law

97. See Carnegie Report, *supra* note 5, at 126.

98. I tend to agree with those who would say that it makes sense for the first year or even the first half of law school to be rigorously focused on inculcating students with the attributes of legal reasoning, knowledge about the law, its history and the like. See, e.g., Kramer, Memorandum, *supra* note 7, at 2–4. That does not mean, however, that we should not strive to find ways to infuse passion, and provide rich context-based learning opportunities, during the first year of law school. At the University of Washington we are close to striking the right balance with respect to environmental law. Our student environmental law society, GreenLaw, provides diverse opportunities for education and outreach for 1Ls including brownbag lunches, a speaker series, and a yearly advocacy project on behalf of an NGO. First year law students also receive support to attend conferences such as the University of Oregon's Public Interest Environmental Law Conference, and we have been successful at receiving discounts and/or fee waivers for students so that they may attend CLEs addressing environmental law issues. Students are also encouraged to observe oral arguments or trials. The Gates Public Service Scholars Program provides additional opportunities to expose students to creative thinkers and leaders in public interest, including environmental law. For those interested in subject of first year engagement, see Deborah Maranville, *Infusing Passion*, *supra* note 35, at 61 (arguing for context-based instruction even during the first year "ideally . . . includ[ing] some real-life experiences, preferably experiences involving contact with clients"); Best Practices Report, *supra* note 6, at 151 (asserting that "[a]s early as possible in law school, preferably in the first semester, law students should be exposed to the actual practice of law"); see also Tarlock, *supra* note 11, at 303 (contending that "if a meaningful level of sophistication is to be reached by the student during this period, he must be introduced to the broad underpinnings of his specialty in the first year").

99. See Barry, *supra* note 12, at 24–30.

schools like ours have already made a substantial commitment down the road to small class seminars and clinics, that horse is already out of the barn, and it is a matter of ensuring that we are getting a good return on those investments with due conservation given to the pedagogies employed.¹⁰⁰ Given that fact, we should seek ways to maximize the benefits from those decisions regarding small classes. Nevertheless, there is no escaping the fact that this type of curriculum is expensive.¹⁰¹ In the end, my response is that over the long run it is even more costly to our students, our profession, and the public, to fail to educate and produce the types of highly-effective problem solvers and leaders that we need. Moreover, there are costs associated with student health and the health of the profession that are often left out of such cost/benefit equations. For example, there is a substantial and growing body of research indicating that law school, as it is traditionally taught, may well contribute to significant detrimental mental health consequences for students and to similar problems seen in the bar.¹⁰² Some of these same studies suggest that some of the approaches outlined above, which involve active, engaged learning, in context, and in service of others, may reduce some of these negative effects associated with traditional law school pedagogy and perhaps may even lead to happier, healthier, more self-directed students—goals that I expect we should be striving to achieve.

In addition, the *Carnegie Report* and the *Best Practices Report* both make the point quite clearly that the public's regard for our profession is tarnished, and regard or esteem from within the profession also has much room for growth.¹⁰³ As others have observed, "a recommitment to the law as a learned profession"¹⁰⁴ and to the advancement of law as a

100. See, e.g., *id.* at 24.

101. See Carnegie Report, *supra* note 5, at 94 (teaching of practice is "unavoidably more expensive than large classes."), 202 (describing as a "major obstacle" the "trade-off between higher costs and greater education effectiveness").

102. Benjamin, Kazniak, Sales & Shanfield, *The Role of Legal Education in Producing Psychological Distress Among Law Students and Lawyers*, 1986 AM. B. FOUND. RES. J. 225–52 (1986); James M. Wakefield, *Attitude, Ideals and the Practice of Environmental Law*, 10 UCLA J. ENVTL. L & POL'Y 169 (1991); see also Kennon M. Sheldon & Lawrence S. Krieger, *Understanding the Negative Effects of Legal Education on Law Students: A Longitudinal Test of Self-Determination Theory*, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=913824 (last visited Sept. 3, 2007); Best Practices Report, *supra* note 6, at 29–36.

103. Carnegie Report, *supra* note 5, at 19.

104. Rob Atkinson, *Law as a Learned Profession: The Forgotten Mission Field of the Professionalism Movement*, 52 S.C. L. REV. 621, 626 (2001).

public good are required. Here again, some of the pedagogies suggested in this paper might help our students form what our Interim Dean Gregory Hicks recently referred to in a conversation with several of us as an “ethos” in the law and in the practice of law that is rooted in a sense of professionalism and meaning.

CONCLUSION

We can predict with a high degree of certainty that the problems the next generation of environmental lawyers will face will be more complex and more difficult to address, and that the stakes will be even higher. Hopefully, this paper will help to advance the discussion that started with John Bonine’s listserv provocation asking how best to teach environmental law in this era, and help us to begin to answer such important questions as:

How we might intentionally go about our work as teachers to help our students develop from novices into experts able to help solve the most difficult and vexing problems of their day;

How we can provide a solid foundation that supports our students and encourages them to live authentic, professional, and compelling lives in the law;

How we can encourage our students to fuse their knowledge of the profession and the craft with passion, creativity, and open-mindedness;

How we can foster in our students the desire for continued learning, the willingness to find their own voices and answers, and the confidence to question orthodoxy; and

How we can best provide our students with a legal education that prepares them to deal with degrees of uncertainty and rates of change that are unprecedented.

While focusing attention on these questions, we must not lose sight of the fact that much of our students’ learning, whether it takes place in a doctrinal class, clinic, simulation class, or completely outside the classroom, is through observation and what is *not* said. Though this places much responsibility upon us as teachers to “do as we say,” it also provides me with a final opportunity to return to our symposium honoree, Bill Rodgers. For his is a life in the law that on a daily basis

provides his students, and the rest of us, with an example of a life in the law well-lived: a life in the law exemplified by mastery of his field and craft, passion, creativity, persistence, breadth of mind, curiosity, empathy, humility, and engagement on behalf of others and the common good. Professor Rodgers' remarkable career models the way for those of us that follow to recognize, develop and nurture these traits in our students, and in ourselves.

