

# TEACHING SUBSTANTIVE ENVIRONMENTAL LAW AND PRACTICE SKILLS THROUGH INTEREST GROUP ROLE-PLAYING

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## INTRODUCTION

Most law students take their first introductory course in environmental law during their second year of law school.<sup>1</sup> The traditional first-year curriculum does little to prepare students for the complex statutory and regulatory models for most environmental regulation.<sup>2</sup> Law students at the end of their first year often have had little exposure to statutory interpretation.<sup>3</sup> Further, they often have no exposure to administrative law and regulatory implementation.<sup>4</sup> These students may expect statutes to provide clear statements of rules rather than guidelines for administrative rulemaking. They also tend to view the lawmaking and interpretive process through the traditional lens of congressional legislation and common-law-style judicial interpretation in a bipolar scheme of implementation—where the regulatory agencies and the regulated industries are the only players.

In fact, environmental regulatory programs constantly evolve through a complex interaction of legislative amendment, administrative rulemaking, and judicial interpretation.<sup>5</sup> Influencing these programs are the multipolar interaction of regulated industries, environmental groups, state agencies,

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1. *E.g.*, *Academics*, TUL. U. L. SCH., <https://perma.cc/99P6-USNG> (last visited Feb. 14, 2017) (explaining that environmental law is generally a second or third year course); *Course Information: The Curriculum*, WIS. U. L. SCH., <https://perma.cc/KL3U-3FA6> (last visited Feb. 14, 2017).

2. Ethan J. Leib, *Adding Legislation Courses to the First-Year Curriculum*, 58 J. LEGAL EDUC. 166, 170, 173, 179 (2008).

3. *Id.* at 166, 172, 173.

4. *Id.*

5. *See, e.g.*, ZYGMUNT J.B. PLATER ET AL., ENVIRONMENTAL LAW AND POLICY: NATURE LAW & SOCIETY 208–10 (4th ed. 2010) (explaining relationships between federal environmental statutes and the administrative agencies, state regulators, local environmental protection agencies, industry, and environmental groups).

and federal regulators.<sup>6</sup> Law students accustomed to the bipolar model of common-law legal development and who expect statutory law to consist of a simple reading of clear statutory texts can find this interest group pluralist model of law development bewildering. One way to help give context to this complex interaction is to place students in the roles of the various advocates and decision-makers in the environmental law processes. Assigning students to adopt the perspective of various distinct players in the regulatory process, such as agency lawyer, industry lawyer, and environmental NGO lawyer, helps make this complex interaction more accessible to students. This also provides an introduction into the skills of statutory interpretation and regulatory implementation.

At Pace Law School, we have had considerable success integrating this approach into an Environmental Law Skills course.<sup>7</sup> This course combines a comprehensive study of the Clean Water Act (CWA) regulatory program with skills-based exercises in administrative rulemaking, judicial review, regulatory permitting, negotiation, and enforcement.<sup>8</sup> The course was added to the curriculum in the 1990s in response to the growing recognition by the legal academy that the traditional case-oriented method of instruction failed to result in law graduates with basic competencies expected of lawyers.<sup>9</sup> The course has been refined over the years to incorporate the Carnegie Report's more recent critiques: the legal education's failure to foster students' development of their professional identities and their understanding of lawyers' role in representing clients.<sup>10</sup> By integrating role-playing, problem solving, and doctrinal instruction, the course seeks to engage students in active learning and professional identity development. The course also seeks to implement recommendations for the improvement of legal instruction contained in Professor Stuckey's influential 2007 report, *Best Practices for Legal Education*.<sup>11</sup> In particular, the course seeks to

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6. M.E. Kraft, *Influence of American NGOs on Environmental Decisions and Policies: Evolution over Three Decades*, in *THE ROLE OF ENVIRONMENTAL NGOS—RUSSIAN CHALLENGES, AMERICAN LESSONS: PROCEEDINGS OF A WORKSHOP* 141 (2001).

7. *Environmental Skills & Practice*, PACE U., <https://perma.cc/4X87-TZSJ> (last visited Feb. 14, 2017).

8. *Id.*

9. AM. BAR ASS'N: SECTION OF LEGAL EDUC. & ADMISSIONS TO THE BAR, REPORT OF THE TASK FORCE ON LAW SCHOOL AND THE PROFESSION: NARROWING THE GAP (1992) [hereinafter *MACCRATE REPORT*].

10. WILLIAM M. SULLIVAN ET AL., *EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW* 14 (2007).

11. *See generally* ROY STUCKEY ET AL., *BEST PRACTICES FOR LEGAL EDUCATION: A VISION AND A ROADMAP* (2007) (describing best practices and recommendations for improving legal programs and training).

“teach doctrine, theory, and practice as part of a unified, coordinated program of instruction” as recommended in that report.<sup>12</sup>

This course is run, in part, as a semester-long simulation for the 30 to 50 students enrolled.<sup>13</sup> Students volunteer for a wide variety of specific roles in the environmental law process, including: President of the United States, congressional representatives, federal judicial roles, federal and state agency decision-makers and lawyers, regulated industry, and environmental and wildlife groups. Rather than traditional essay exams or research papers, student submissions consist of professional work product, such as comments on proposed regulations or draft permits, administrative actions, and enforcement or judicial-review proceedings. The simulation is open ended. Students respond to the actions of students playing other roles, including agency actions. Learning outcomes seem to be positive. Although students find the course challenging, as they are expected to play a more active role in defining the appropriate work product for each situation, student feedback indicates that students find the course to be valuable preparation for professional internship placements and postgraduate employment in environmental law.

#### I. THE MULTICENTRIC, PLURALISTIC NATURE OF ENVIRONMENTAL LAW

Environmental law is multicentric and pluralistic. It is multicentric because no single institution generates all of the rules of decision for environmental law;<sup>14</sup> it is pluralistic because the creation and implementation of environmental law standards involves multiple stakeholders from different sectors of society.<sup>15</sup> The experience of learning the rules and practical skills of environmental law thus differs from the typical first-year law school curriculum, which focuses almost exclusively on common law legal rules generated by a single institution (the judiciary) generally resolving bilateral disputes. Criminal law, one statutory course in the standard first-year curriculum, involves relatively simple statutory provisions enacted by legislatures and interpreted by the judiciary—adding

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12. *Id.* at 99.

13. Simulation courses have many educational benefits, particularly in improving student engagement. *See generally* Jay M. Feinman, *Simulation: An Introduction*, 45 J. LEGAL EDUC. 469, 469–71 (1995) (discussing the broad benefits of simulations for motivating and teaching students); Deborah Maranville, *Infusing Passion and Context into the Traditional Legal Curriculum Through Experiential Law*, 51 J. LEGAL EDUC. 51, 58 (2001) (discussing how simulations can help motivate students); David I. C. Thomson, “Teaching” Formation of Professional Identity, 27 REGENT U. L. REV. 303, 325–29 (2015) (discussing the benefits of using simulations to teach legal doctrine).

14. Zygmunt J.B. Plater, *Law, Media, & Environmental Policy: A Fundamental Linkage in Sustainable Democratic Governance*, 33 B.C. ENVTL. AFF. L. REV. 511, 521 (2006).

15. *Id.*

just one lawmaking institution to the mix.<sup>16</sup> Criminal law is similarly bilateral, always involving a government enforcement interest and a criminal defendant. Students studying environmental law in the fall semester of their second year are not prepared for the bewildering array of institutions and actors involved in the making and implementation of environmental law.<sup>17</sup>

### *A. Multiple Interactive Lawmaking Institutions*

Most environmental law standards are implemented through a system of legislative enactment, administrative implementation, and judicial interpretation.<sup>18</sup> Cooperative federalism adds a second layer of institutions, as state legislatures and agencies play a role in the implementation of federally established standards.<sup>19</sup> The development and implementation of environmental standards thus involves many actors: the Senate, the House of Representatives, congressional committees, the President, national and regional Environmental Protection Agency (EPA) offices, the White House Office of Management and Budget, the United States Army Corps of Engineers, administrative law judges, federal district courts, courts of appeals, the United States Supreme Court, state legislatures, and state environmental agencies.<sup>20</sup>

### *B. Pluralistic Stakeholder Involvement*

Added to this list of institutions with formal lawmaking authority are the stakeholder and advocacy institutions at the local, state, and federal levels. Environmental administrative law led the transition from the bipolar model of law administration to the pluralistic, polycentric stakeholder

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16. One exception to the common law focus of the first year is Civil Procedure as it is generally focused on the interpretation and application of textual rules. Some schools have modified their first-year curricula to include statutory or legislative-regulatory courses. *See generally* Leib, *supra* note 2, at 169, 172, 173, 189 (arguing that legislation courses should be added to first-year curriculum due to a lack of statutory introduction in other courses).

17. *See generally* Martin J. Katz, *Facilitating Better Law Teaching—Now*, 62 EMORY L.J. 823, 827–28 (2013) (providing recent discussions on the role of experiential learning in developing legal skills and professional identity and solutions for how to improve legal education through experiential learning and innovation); Deborah Maranville et al., *Re-Vision Quest: A Law School Guide to Designing Experiential Courses Involving Real Lawyering*, 56 N.Y. L. SCH. L. REV. 517, 519 (2011–2012) (offering a framework for law schools to consider in designing experiential programs); *see also* Jessica Erickson, *Experiential Education in the Lecture Hall*, 6 NE. U. L.J. 87, 96, 110 (2013) (explaining the need for doctrinal professors to use experiential education in the classroom).

18. *The Basics of the Regulatory Process*, ENVTL. PROT. AGENCY, <https://perma.cc/EBF5-KZB4> (last visited Dec. 16, 2016).

19. PLATER, *supra* note 5, at 210.

20. *Id.* at 53–57.

model now prevalent.<sup>21</sup> Under the bipolar model, agency administration of regulatory programs was seen as a bilateral negotiation between the agency and the regulated industry.<sup>22</sup> As the administrative state evolved, this bilateral negotiation gave way to a more pluralistic, multicentric model.<sup>23</sup> Consumers and environmental groups demanded a seat at the table for representatives of the public interest to act as a check on agency capture.<sup>24</sup> In the modern administration of the environmental regulatory program, NGO actors affect the development of the law through their advocacy and litigation activities.<sup>25</sup> Thus, the institutions of environmental law also include: individual industrial facilities (e.g., steel mills and power plants); national trade associations representing such industries; states; individuals; local, regional, and national environmental organizations; and wilderness and historic preservation organizations.<sup>26</sup> Individual players in these entities include business executives, environmental managers, community organizers, activists, and, of course, attorneys.

To the second-year law student, this presents a bewildering array of institutions, most of which they have never even heard of before. Having students step into the role of the individual professional players within these institutions helps students understand the roles of, and interactions between, these institutions in the law process. This also helps students understand the tasks demanded of, and the skills needed by, the individual professionals within these institutions. Having students adopt semester-long roles within this multicentric, pluralistic universe helps demystify and uncomplicate both the environmental law process and the role lawyers and other professionals play within the process. Students also experience the interactive nature of the environmental law process first hand as they learn how each institutional actor reacts to measures taken by the others.

## II. ENVIRONMENTAL LAW SKILLS/CLEAN WATER ACT COURSE: SEMESTER-LONG ROLE-PLAYING

The Environmental Skills/Clean Water Act course has been the core course of the Pace Law School environmental curriculum for over 20 years. It is a requirement for students seeking to graduate with the Environmental

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21. *Id.* at 216; Karl Coplan, *Citizen Litigants Citizen Regulators: Four Cases Where Citizen Suits Drove Development of Clean Water Law*, 25 COLO. NAT. RESOURCES, ENERGY & ENVTL. L. REV. 61, 74 (2014).

22. Coplan, *supra* note 21, at 74.

23. PLATER, *supra* note 5, at 216.

24. *Id.* at 216–17.

25. *See, e.g., id.* at 238–39.

26. *Id.* at 6.

Law Certificate.<sup>27</sup> The course combines an in-depth study of the United States water protection law with an introduction to administrative practice and procedures, along with practical skills. I have been teaching the course since 2007.

#### *A. Course Description and Goals*

The course focuses on the legal regime, common law and statutory law, governing water pollution. This legal regime is similar to the legal regimes governing other aspects of pollution and waste control, such as the law of air pollution and waste disposal law. Because common law governed the field before it was addressed by statute, the course starts with the common law. Most of the course, however, explores the interpretation and implementation of a complex statute, the federal CWA. An integral part of its interpretation and implementation is the administrative process common to all regulatory statutes, governed by the federal Administrative Procedure Act (APA). The course addresses the role of administrative agencies and the APA before addressing the CWA. The course uses the Jeffrey Miller, Ann Powers, and Nancy Long casebook, *Introduction to Environmental Law, Cases and Materials on Water Pollution Control*.

The thesis of the course is that by learning to navigate one complex regulatory statute and its implementing regulations, students will be able to navigate others on their own or with minimum guidance. The CWA is a good introduction to the challenges of statutory interpretation as it is a complex statute, in-artfully drafted in some places and ambiguous in others, with a rich legislative history. EPA's regulations implementing the CWA are similarly a good introduction to the challenges of regulatory interpretation, as they are more complex and more technical than the Internal Revenue Service (IRS) regulations implementing the Internal Revenue Code. The emphasis of this course is on learning how to solve problems using statutory and regulatory sources.

During the first week, students are assigned roles for classroom discussion and exercises—i.e., politician, environmental activist, public-interest lawyer, EPA lawyer, or lawyer for an industrial enterprise. Students are expected to analyze and argue problems and disputes based on their assigned perspectives throughout the course. Grades are based on four written projects (90%) and class participation (10%). Two major writing

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27. *Certificate in Environmental Law*, PACE U., <https://perma.cc/CV3C-JB52> (last visited Dec. 16, 2016).

and research projects count for 30% and 40% of the grade, respectively; two follow-up assignments count for 10% each.

## *B. Course Structure*

### 1. Overview

The course starts with an examination of common-law remedies for water-pollution problems in the absence of any statutory controls. The course then moves on to an overview of administrative law and procedure and an introduction to, and overview of, the federal CWA.<sup>28</sup> After this overview, the course examines in great detail various aspects of the CWA regime of water pollution regulation, including: the elements of the CWA permitting trigger; the derivation of water-quality-based standards; the derivation of technology-based standards; and National Pollutant Discharge Elimination System (NPDES) permit contents, procedures, and enforcement. Written assignments include public comments on a proposed rule, with a follow-up assignment consisting of a final rule and the papers involved in judicial review of the rule. Comments on a draft NPDES permit, with follow-up papers involved in review and enforcement of the final permit, are also assigned.

### 2. The Roles

The range of classroom roles available for students to assume demonstrates the world of human actors in the environmental law process.<sup>29</sup> Government roles include legislative, administrative, executive, and judicial roles at the federal level, as well as state administrative roles. Industry roles include lawyers and executives representing various industries subject to clean water regulation. Environmentalist roles include community activists, as well as lawyers representing local, regional, and national environmental organizations.

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28. Clean Water Act, 33 U.S.C. §§ 1251–1387 (2012).

29. An additional benefit of having students adopt unique individual roles for the entire semester is that it promotes each student's sense that they are valued as unique individuals making an essential contribution to the course. Professor Stuckey identified this sense of individual value as a key element of an effective learning environment. STUCKEY, *supra* note 11, at 114 (quoting Stephen D. Brookfield, *Adult Learners: Motives for Learning and Implications for Practice*, in *TEACHING AND LEARNING IN THE COLLEGE CLASSROOM* 137, 143 (Kenneth A. Feldman & Michael B. Paulsen eds., 1993)).

On the first day of class, the students elect one student to serve as President. The President then appoints an EPA Administrator, EPA General Counsel, EPA Regional Administrator, Director of the Office of Management and Budget, as well as Supreme Court justices, a federal court of appeals judge, and a district court judge. Two students serve as Representatives in the House of Representatives and two students serve as Senators—the congressional delegation being divided between an industrialized state and a more rural state. One student serves as an Assistant Attorney General and another serves as an EPA Administrative Law Judge. Lower level EPA roles include a Senior Staff Attorney, Water Quality Engineer, Regional Counsel, Permit Writer, and Regional Water Quality Engineer. State governmental roles include environmental conservation agency personnel, such as Commissioner, General Counsel, Regional Permit Administrator, Regional Counsel, Regional Water Quality Engineer, and Fisheries Biologist.

Industry roles include both executives and attorneys for steel companies, power generation companies, petrochemical companies, mining companies, pulp and paper mills, metal finishers, agricultural interests, and real estate developers. Also included in the industry category are attorneys and environmental engineers for a city and a small town.

On the environmentalist side, roles available include lawyers and activists for local citizen groups and local environmental groups, such as a scenic preservation organization and a local chapter of Trout Unlimited. A regional waterkeeper organization is also a role. Students also adopt the role of lawyers for national environmental organizations, such as National Resources Defense Council, Environmental Defense Fund, Defenders of Wildlife, The Wilderness Society, and Sierra Club.

With the exception of the presidential appointment, student roles are assigned by the professor. Each student must request their preferred roles on the first day of class, indicating what in their background qualifies them for the requested role. By the second class of the semester, students are told to be prepared for their roles in the classroom discussion.

Anyone who has participated in public hearings, conferences, court sessions, and other places where attorneys congregate has probably observed that attorneys tend to cluster according to the interest groups they represent. That is, industry lawyers tend to cluster with other industry lawyers, lawyers for environmental groups tend to congregate with other environmentally leaning lawyers, and government lawyers tend to gravitate toward other government lawyers. In order to reflect this social reality of practice, students are asked to sit in the same part of the classroom as other students with similar interest group roles. Thus, the environmental group lawyers all sit on one side of the classroom, while their adversaries, the

industry lawyers, sit on the other side, facing off across the open center of the classroom. Students with judicial roles sit in the front seats of the center section, where they are ready to hear arguments when necessary. EPA lawyers and personnel sit together on one side of the center section, while state environmental agency personnel sit together on the other side. The interest group seating assignments not only reflect one social reality of practice, it also facilitates discussion and collaboration within interests groups during classroom problem solving and simulations.

*C. The Classroom Experience: Common Law, Legislative, Statutory, and Regulatory Problem Solving*

Other than the in-class simulations, class sessions are conducted in a combination of lecture and Socratic problem solving. Rather than question students about “rules,” the classroom conversation alternates between interactive problem solving based on the reading materials and close examination of the procedures and advocacy roles involved in the cases. Classroom simulation exercises include a public comment hearing on a proposed rule, presentation of the final rule, oral argument on the judicial review proceeding challenging the final rule, a negotiation, and oral argument on review of a final permit.

This section gives some examples of how the class uses role-playing to explore solutions to water-pollution issues. These problem-solving modules include common law remedies, legislative responses, an examination of the environmental law process, reading statutes, and permit effluent standards problem solving.

1. Reading and Class Discussion Modules

a. Common Law Problem Solving

The semester begins with an examination of common-law remedies for water pollution in the absence of any legislative or regulatory controls. This module is based on a hypothetical lake, Lake Between, located on the boundary between two fictional states, New Union and Progress. Around the lake are various sources of water pollution, including a coal-fired power plant, feedlot, slaughterhouse, city sewage treatment plant, apple orchard, recreational marina, small village with leaky septic fields, and pastures. The students playing community activists are asked to play the role of lawyers representing the small community suffering from the water pollution. They devise common law legal theories that might provide a remedy. Students must use the assigned case readings to: decide which defendants to sue,

articulate the elements of the causes of actions, apply the facts to the elements, and even consider what judicial fora would be available for an interstate pollution dispute. First, the plaintiffs' lawyers choose a defendant, a cause of action, and a theory, such as public or private nuisance. Next, attorneys for the defendant, such as the power plant or the feedlot, must make arguments for why the case should be dismissed or why their client should prevail on the merits. These arguments are developed at a very basic level, *ad hoc*. That is, the students were not instructed ahead of time to be ready for the specifics of the class discussion. This helps students learn how to "think on their feet," a valuable professional skill. The student in the role of a United States District Court judge would be asked how she would rule on the arguments presented by both sides. The cases assigned in the readings are sources of rules and authority for the arguments made by both sides, without the usual Socratic examination of the facts and holding of each specific case.

In addition to teaching practical skills—like developing causes of action, applying law to facts, choice of law, and choice of forum—the module on common-law remedies illustrates the gaps in the common law when it comes to solving the water-pollution problems plaguing Lake Between. Students need to address issues of joint causation and liability, the lack of prospective remedies, municipal immunity, choice of law, and the lack of interstate remedies in formulating their claims and responses.

#### b. Legislative Problem Solving

Following the common-law exercise, the class is asked to consider a legislative solution to the interstate water-pollution problems on Lake Between. To introduce the possibility of legislative solutions, the student acting as the community activist attorney is asked to consider his options when the common-law judicial remedies have been dismissed or provided highly incomplete relief. Who should the environmental interests call when the law fails them? Eventually, with some gentle prodding, students in role think about calling their congressional representatives to seek legislation that would protect the water quality in Lake Between. This sparks a discussion among the four members of Congress in the classroom—what should legislation protecting water quality look like? The legislators are asked to draft statutory language to address water-pollution problems, like those on Lake Between. Legislators may create something like an administrative agency to implement a program of water-pollution regulation because of the impracticality of drafting general language that addresses the specifics of all the potential permutations of water-quality problems. This introduces the concept of the administrative branch of government, a

concept that is, for the most part, missing from students' civics education and the standard first-year curriculum. As students have already read a general overview of the CWA, the legislative drafting exercise usually tends to gravitate toward the CWA's structure of a strict permitting requirement with federally established standards for effluent limits. Representatives for the industrialized state and rural state must grapple with their constituents' interests and preferences in terms of permit administration (state or federal) and effluent standard setting (water-quality-based or technology-based), among other issues. Although time does not permit the drafting of a fully conceived statute for the regulation of water pollution, students are exposed to the legislative drafting issues involved and the complexities of establishing a water regulation scheme that would apply throughout the country.

### c. Environmental Law Process Simulation

The next classroom module is an introduction to administrative law and administrative processes. After reviewing provisions of the APA and cases on judicial review of administrative action, the class proceeds to examine the case of *Republic Steel v. Costle*.<sup>30</sup> This case illustrates the complex interaction among Congress, federal and state agencies, the courts, and regulated industry in the development of environmental law rules of decision.

*Republic Steel* is a wonderful, if complicated, illustration of the institutional interactions that lead to environmental law rules. The actual holding of the case—that a state-issued NPDES permit may not extend the statutory deadline for achieving Best Practical Technology (BPT) based effluent limitations—is obsolete, as all such deadlines in the CWA are decades past.<sup>31</sup> But, the case's factual and procedural background provide a useful illustration of the roles that various institutions play in the creation of environmental law rules of decision. The rough chronology of the events behind *Republic Steel* is as follows: (1) Congress enacted the CWA, requiring EPA to publish effluent limitations guidelines (ELGs) for BPT by October 18, 1973, and requiring dischargers to achieve compliance with BPT by April 1, 1977; (2) Ohio was delegated authority over its NPDES permitting program; (3) EPA failed to publish ELGs by the statutory deadline; (4) in the absence of ELGs for the steel industry, Ohio issued a permit to Republic Steel that waived compliance with the statutory BPT

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30. *Republic Steel Co. v. Costle*, 581 F.2d 1228 (6th Cir. 1978).

31. *Id.* at 1234 n.17.

deadline until EPA issues ELGs; (5) EPA vetoed the permit on the grounds that no permit can waive a statutory deadline; (6) the Sixth Circuit overturned the EPA veto on the grounds that EPA's failure to issue ELGs made the deadline unenforceable; (7) Congress held hearings on the EPA's delay, which resulted in a committee report disagreeing with the Sixth Circuit and an amendment to the enforcement sections of the CWA, allowing for a limited extension by EPA of the statutory deadline to implement BPT; (8) the United States Supreme Court granted, vacated, and remanded the petition for *certiorari* seeking review of *Republic Steel I* in light of the 1977 Amendments to the CWA; and (9) the Sixth Circuit, on remand, reversed itself and held that a NPDES permit cannot waive the statutory BPT deadline.<sup>32</sup>

As is apparent from this tortured procedural background, there is a role for nearly every player in the environmental law process in the *Republic Steel* saga. Classroom discussion of the case proceeds by having each student role play their part in the process, in light of the statutory scheme and their clients' institutional interests. The EPA Administrator must read the statute and figure out what responsibilities and deadlines for ELG issuance Congress has placed on her shoulders. Attorneys for the steel company must figure out what compliance responsibilities EPA places on them and where to apply for the required permit. The state NPDES Permit Administrator must address the challenge of writing a permit for a major in-state employer, in the absence of EPA guidance on the appropriate effluent limitations. EPA personnel must decide whether it is in EPA's institutional interest to veto the permit. The industry lawyers must formulate arguments to present to the Court of Appeals judge on judicial review of the permit veto, and the judge must decide the case. The congressional representatives must discuss how to respond to the court's decision allowing deferral of the critical compliance deadline and consider non-legislative tools to influence the process, such as congressional hearings and committee reports. The Supreme Court justice must decide how to deal with the petition for *certiorari* in light of the congressional amendment (many second-year students have never heard the phrase "grant, vacate, and remand" before). The industry and EPA lawyers have to formulate arguments on remand in response to the 1977 Amendments, and the Court of Appeals judge must explain his decision.

By the end of this exercise, students' heads are reeling. But, they have a greater understanding of the various institutions' roles in creating the

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32. *Id.* at 1231.

“rules” of environmental law in the regulatory state, as well as the tasks demanded of the professionals within these institutions.

#### d. Statutory Interpretation Problem Solving

After the module on administrative law and the regulatory lawmaking process, the class attacks the problem of statutory interpretation in the case of a complex statute with a rich legislative history. The class’s first task is to derive the five elements of a violation of the CWA permitting scheme from the statutory text, starting with the over-generalized prohibition of CWA § 301: “Except as in compliance with this section and [permitting sections of the CWA] the discharge of any pollutant by any person shall be unlawful.”<sup>33</sup> Students must then work through the cross-references and definitions sections of the CWA in class to discover that the statute establishes five elements for a NPDES permitting scheme violation: (1) discharge; (2) of a “pollutant”; (3) from a “point source”; (4) to “waters of the United States”; and (5) without, or in violation of, a permit issued under either § 402 or § 404 of the CWA.<sup>34</sup> Then, the class examines regulations and judicial opinions interpreting each of these elements, relying on both the more traditional case method as well as assigned problems. As a review exercise, the class considers which of the pollution sources identified in the Lake Between hypothetical from the first class would require NPDES permits.

The course then proceeds to examine water-quality- and technology-based approaches to effluent limit setting and permitting issues. This part of the course examines each topic, first, by deriving the basic structure of the regulatory system from statutory and regulatory sources. Then, the course reviews case decisions interpreting and applying the regulatory program in exemplary cases. The statutory and regulatory interpretation examples continue to expose students to the complexities of implementing a statutory regulatory program.

The course’s use of water-quality-based, effluent standard setting provides a good example of this approach. We might start by having the student in the role of the state Water Quality Engineer explain the intuitively necessary steps to establish a system of water-quality-based effluent limits. The five basic steps that states must take to establish water-quality-based effluent limitations under the CWA are: (1) designate desired uses of various water bodies; (2) establish water quality criteria to ensure

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33. 33 U.S.C. § 1311(a).

34. *Id.* §§ 1342(a), 1344(a), 1362(7), (12).

sufficient water quality to support such uses; (3) determine which water bodies within the state fail to meet the criteria for their designated use, so-called impaired waters; (4) establish the maximum pollutant loadings permissible on such impaired waters as necessary to allow them to meet the criteria; and (5) allocate the permissible loadings among pollution sources. While these steps may be easy to state (and perhaps a little less easy to intuit), they are very difficult to find in the applicable statutory and regulatory texts. The class thus focuses on finding the authority for each of these steps in the regulatory program, starting first with CWA § 303.<sup>35</sup> This section specifically calls for waterbody use designations, water quality criteria, designation of impaired waters, and establishment of total maximum daily loads; however, it provides very little guidance for allocating the wasteload among sources and incorporating these limits into permits (at least for conventional pollutants). Discovering authority for the wasteload allocation and implementation parts of the water-quality-limits process requires synthesis of other statutory sections, such as the CWA § 301(b)(1)(C), which mandates effluent limits sufficient to achieve water-quality standards,<sup>36</sup> and EPA regulatory definitions, such as 40 C.F.R. § 130.2(i),<sup>37</sup> which defines a Total Maximum Daily Load (TMDL) to include a wasteload allocation designating the permissible loading among point sources.<sup>38</sup> Once the class derives the parameters of the statutory and regulatory approach, it considers specific examples that apply these standards, largely through consideration of reported judicial decisions. Individual students are expected to be well versed in the cases involving their specific clients, such as the National Resources Defense Council or their industry, such as the pulp and paper industry.

#### e. Permit Writing Problem Solving

In the course of examining the NPDES permits' drafting process and establishing effluent limitations for individual dischargers, students are required to calculate the appropriate numerical effluent limits for a hypothetical wool scouring plant discharger. This assignment requires students first to determine the correct industry category and whether the plant would be considered a new source subject to New Source Performance Standards or an existing discharger subject to Best Practicable

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35. *Id.* § 1313(c)(2)(A), (d)(1)(C).

36. *Id.* § 1311(b)(1)(C).

37. 40 C.F.R. § 130.2(g)–(i) (2015).

38. *Am. Farm Bureau v. Envtl. Prot. Agency*, 792 F.3d 281, 309 (3d Cir. 2015) (upholding the regulatory definition of the statutory term “Total Maximum Daily Load”).

Control Technology for conventional pollutants. Students must then find the appropriate effluent limitation ratios in EPA's Industrial Effluent Guidelines and apply these ratios to determine a numerical effluent limit stated both in mass-based limits (pounds per day) and concentration-based limits (milligrams per liter). Although the assignment does not require math skills beyond multiplication, division, and conversion of units of measurement, the prospect of being required to perform any mathematical analysis intimidates many law students. The assignment is graded pass/fail, and we spend most of a class session going over the calculations in detail to give the students some comfort with the quantitative aspects of environmental law practice.

## 2. Written and In-Class Simulations

In addition to the regular classroom discussion, there are four written assignments and two in-class oral exercises. The first written assignment is a public comment on a notice of proposed rulemaking, usually for a regulation. The first oral assignment is, for most of the students, to present at a public-comment hearing on the proposed rule. The second written assignment is a follow up to the first, in which students prepare papers involved in judicial review of the final rule. The third written assignment consists of comments on a draft NPDES permit, usually for an industrial facility. The fourth written assignment is a follow up to the third, consisting of papers involved with either obtaining review of the final permit or enforcement proceedings for violations of the final permit. The final oral exercise is, for most students, a negotiation session in the context of the enforcement proceedings. The follow-up writing exercises become an interactive simulation, as students must respond to the strategic choices and arguments made by students representing other institutions and interest groups.

### a. Rulemaking Simulation: NPR, Comments, Final Rule, Papers Challenging Final Rule, Argument, and Decision

The first written exercise, which counts for 30% of the final grade, is to draft public comments on a proposed EPA rule implementing the CWA. The idea of administrative rulemaking is a new concept to most second-year students, as is the concept of informal—notice and comment—rulemaking under § 553 of the APA.<sup>39</sup> The proposed-rule exercise usually

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39. 5 U.S.C. § 553(c).

involves a proposal to either amend a definitional section of the NPDES permitting program or to add or remove one of the regulatory exemptions contained in 40 C.F.R. § 122.3.<sup>40</sup> Because the assignment is at the beginning of the course, students are only familiar with the basic definitional elements of the NPDES permitting trigger. Thus, the assignment is keyed to the expected level of comprehension of the statutory scheme. An example of one of the proposed rules put out for student comment (contained in the first edition of the casebook) was a proposal to include marine engines as point sources subject to regulation under the NPDES program.<sup>41</sup>

Students must write public comments on the proposed rule, generally from the perspective of the clients or interest groups they represent. All industry lawyers are expected to take the industry side of the argument: whether their specific industry is affected. Environmental lawyers must submit comments appropriate to the policy positions of their specific organizations. Students in state environmental agency roles are expected to file comments from the perspective of a state with a delegated NPDES permitting program. All government lawyers and personnel, including the classroom judges, are asked to write comments from the perspective of an EPA Staff Attorney performing an internal review of the proposal. Students are advised that their comments should include analysis of the legality of the proposed rule and the factual and policy arguments that would be expected in public comments from their respective interest groups. The problem is designed to engage students in the legal analysis of the NPDES permitting trigger elements using statutory, regulatory, and case law sources. The writing and research exercise is open ended—students are specifically advised that successful completion of the comment assignment will require both legal and policy research well beyond the materials included in the casebook. Students are also advised to refer to the EPA public-comment docket online at [regulations.gov](http://regulations.gov) to look for examples of similar public comments on proposed rules. Elizabeth Mullin's book on filing effective public comments on environmental decision-making, *The Art of Commenting*, is placed on reserve for student use.<sup>42</sup>

As students' comments are submitted, they are placed on a public docket (except for the "internal EPA" comments submitted by students in

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40. 33 U.S.C. §§ 1316 (a)–(b), 1292.

41. *Id.* § 1342(r) (mooting this example is the Clean Boating Act of 2008, which specifically exempts properly functioning recreational marine engines from regulation under the NPDES program).

42. ELIZABETH MULLIN, *THE ART OF COMMENTING: HOW TO INFLUENCE ENVIRONMENTAL DECISION MAKING WITH EFFECTIVE COMMENTS* (2000).

federal government roles). The day after the comments are due, the EPA personnel hold two public-hearing sessions on the proposed rulemaking. Each student in an advocacy role—industry lawyers, environmental group lawyers, state environmental agency personnel, and congressional representatives—must present oral comments, limited to five minutes each. EPA personnel are charged with presenting the proposed rule at these hearings and conducting the public-hearing sessions. The professor provides short individual feedback to each student on their oral presentation. The oral presentations are video recorded so that students may view their own performance.

After the public-comment hearings, the exercise moves into its second phase, with follow-up writing assignments and oral exercises. The students in EPA roles have the responsibility of considering all public and internal comments and deciding on a final rule, as proposed or with modifications, or a decision to decline to adopt the proposed rule. The EPA students present the final rule in class. The interest groups that are dissatisfied with the EPA final action then have one week to prepare papers seeking judicial review of EPA's final action on the rulemaking proposal. Because there is a disagreement among the circuits about whether EPA modifications to the definitional and exclusion provisions of the NPDES program must be reviewed directly in the Court of Appeals under CWA § 509(b),<sup>43</sup> students must address choice of forum issues in their papers. A week after the papers challenging the final rule are submitted, EPA personnel and students representing interest groups that support the final rule must submit responsive papers defending the final rule. Oral argument is then conducted before the appropriate student judges, who then issue opinions resolving the judicial-review proceeding. All the student papers are posted on the public docket, available on the course website. Unlike the first writing assignment, which must be the individual work of each student, students are encouraged to collaborate and submit joint papers in this follow-up writing assignment—so long as each student identifies their own work product.<sup>44</sup> Given the short time frames for submission of the papers and the inevitable sharing of research and analysis on the public docket, these follow-up papers are given relatively low weight in the final course grade.

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43. *Compare* Nat'l Cotton Council of Am. v. Env'tl. Prot. Agency, 553 F.3d 927, 933 (6th Cir. 2009) (explaining that a rule exempting pesticide spraying from the NPDES permitting program was reviewable directly in the Court of Appeals), *with* Friends of the Everglades v. Env'tl. Prot. Agency, 699 F.3d 1280, 1280 (11th Cir. 2012) (holding that CWA § 509(b) did not grant the Court of Appeals jurisdiction to hear a challenge to a rule exempting water transfers from the NPDES permitting program).

44. STUCKEY, *supra* note 11, at 119 (recommending and encouraging collaboration among students as another way to promote student engagement and learning).

The instructor avoids giving substantive feedback on the students' submissions until the judicial opinions are issued. This prevents influencing the students' thinking in advocacy or judicial roles. On the day that the final opinions are issued, the instructor reviews the problem in detail and critiques the arguments and analyses performed by the students, pointing out common errors of analysis and mistakes.<sup>45</sup> The instructor returns the students' edited comment submissions with a short responsive paragraph outlining the positive points addressed by the students and the issues and arguments that they missed.

b. Draft Permit Simulation: Draft Permit, Comments, Final Permit, and Review of Final Permit

After completing the rulemaking exercise, the substantive coverage of the course proceeds to the technical and procedural issues involved in issuing individual NPDES permits. Students work on the third written exercise of the semester, public comments on a draft NPDES permit. The draft permit is usually for an industrial facility. By design, the draft permit contains several errors in the: calculations, assumptions about the regulatory status, or applicable point-source category or subcategory. In addition to the obvious errors, there are areas of ambiguity with room for argument for stricter or looser effluent limitations or other permit conditions. As with the first written assignment, students must perform out-of-class research. They submit comments on the draft permit on behalf of their assigned client interest group—the industrial facility subject to the permit, environmental groups seeking stronger environmental protection, and state environmental agencies. To make the scoring of issue spotting in the papers more fair, students are encouraged to submit a confidential memo outlining permit errors that are favorable to their clients that they choose not to mention in public comments.

Like the rulemaking comments, the student comment submissions on the draft permit are posted on the public docket, available on the course's web page. Similar to the rulemaking exercise, EPA personnel—usually the water quality engineer and the regional permit administrator—are charged with considering the public comments, issuing a final permit, and responding to comments. In issuing the final permit, the student EPA personnel chooses how to resolve all the substantive issues raised in the

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45. *Id.* at 187–88 (emphasizing the importance of debriefing a simulation exercise as a means to improve student learning).

comments and decides which issues raised real errors in the draft permit that require change.

As with the rulemaking exercise, EPA's final permit becomes the basis for a review proceeding. About one-third of the class is assigned to complete the papers for review of the final permit. This means that students representing interests unhappy with the final permit (often both sides) must first figure out what form of the final permit's initial review is appropriate: judicial review directly in federal district court or court of appeals or some form of administrative review available prior to judicial review. The students seeking review must then figure out what to file to commence a review proceeding and subsequently draft and file those papers. EPA personnel then respond and may make an appropriate motion to dismiss the review papers, if filed in the wrong forum. All the deadlines under the Federal Rules of Civil Procedure, Appellate Procedure, and EPA's rules governing permit procedures apply. Yet, to complete the exercise before the end of the semester, simulation time runs at a ten to one ratio. That is, one "real" day counts as ten days for the purposes of procedural deadlines. Students are informed that the papers will be graded with the understanding that both the time and the page limitations are very short. The emphasis is on identifying the appropriate forum, deadline, form of papers to be filed, and a rough outline of the appropriate arguments. As with the second written assignment, students may collaborate within their interest groups in order to submit joint papers. Ultimately, the permit-review proceedings commenced by the student attorneys are submitted to the appropriate students in judicial (or administrative adjudication) roles for decision. The class jurists then decide the review proceeding and issue an opinion to satisfy their fourth writing exercise requirement.

### c. Enforcement Simulation

Simultaneous with the permit-review proceedings, the remainder of the class engages, prosecutes, and defends enforcement proceedings based on the same final permit issued by the classroom EPA permitting staff. The enforcement exercise proceeds as the class completes the course materials on CWA enforcement. The instructor takes the final permit and generates factual materials based on the final permit. Some materials are selectively made available to various interest groups, but other materials (as appropriate) are available to the entire class. For example, the instructor generates monthly discharge monitoring reports (DMRs), as filed by the discharger, usually showing permit violations and errors. These DMRs are posted publicly to the class website as they would be publicly available in practice. The violations revealed in the DMRs often take advantage of

permit conditions that might be too strict for normal operation of the plant. As part of the enforcement scenario, there is usually some catastrophic environmental event, such as a fish kill or drinking water advisory due to chemical contamination. This may be due to events and operations at the permittee's plant. A news story posted on the website reports the event. State environmental agency personnel may be provided with field investigators' reports detailing results of investigations into possible spills at the plant and assessing possible causation for the environmental catastrophe. Student attorneys for the industrial permittee receive a detailed memorandum identifying compliance problems at the plant and may have information about spills or other unusual events at the plant. Attorneys for the local environmental group may have observations and sampling results performed by citizen watchdogs. Additional DMRs and other information are released to students as the enforcement exercise proceeds.

In the enforcement proceeding exercise, the statutory, regulatory, and civil procedure deadlines apply, with the same ten-to-one ratio of simulation days to "real" days as in the permit-review proceeding. To get the enforcement ball rolling, student attorneys representing environmental groups are given a deadline to file citizen enforcement papers. They are gently steered in the direction of serving a 60-day notice of intent to sue letter under CWA § 505, which is a condition precedent to commencement of a citizen enforcement suit.<sup>46</sup> What follows is entirely up to the diligence, creativity, and professional responsibility of students representing the other interest groups. The exercise is designed to allow students to synthesize what they learned in first-year Civil Procedure with what they have learned in the CWA course. EPA or the state may issue its own administrative or judicial enforcement action. The industrial permittee may negotiate and resolve an enforcement action by either the state environmental department or EPA. The permittee may also rely on government enforcement to preempt a citizen suit based on the diligent prosecution defenses contained in CWA § 505(b)(1)(B) or § 309(g)(6)(A).<sup>47</sup> EPA may file information requests to the discharger. Various parties may file press releases. Civil (or even, on occasion, criminal) actions are usually commenced, and the parties must serve pleadings, responsive papers, motions, and even discovery requests. Even with a ten-to-one time ratio, the semester usually ends before the enforcement proceedings have run their course. In a form of musical chairs, when the semester music stops, the record is closed. The

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46. 33 U.S.C. § 1365(b)(1)(A).

47. *Id.* §§ 1365(b)(1)(B), 1319(g)(6)(A).

class jurists are asked to decide pending motions and cases on whatever papers have been submitted.

As with the other follow-up exercise, joint submissions and teamwork are encouraged and multiple submissions are often necessary. The papers are graded very leniently, with an emphasis on correctly identifying the appropriate form of lawyers' work product for the situation. Traditional intra-office analysis memoranda (the bane of legal education) are strongly discouraged. The follow-up enforcement exercise only counts for 10% of the course grade, so the downside risks to student creativity are low. Instructor feedback on these papers consists of a relatively brief email identifying the basis of the grade, the appropriateness of the paper's form, and a brief critique of the substantive arguments and analysis in the papers.

#### d. Negotiation Simulation

Toward the end of the enforcement exercise, the class also engages in a simulated negotiation. Before the exercise, the instructor presents a lecture on negotiation styles and strategy. For the simulation, students are broken up into four or five rooms containing representatives of industry, environmentalists, EPA, and state environmental agencies. The students are asked to attempt to negotiate a resolution of the pending enforcement proceedings and environmental issues based on the materials distributed during the enforcement exercise. Each room must report the results of their negotiation to the full class, regardless of whether an agreement was reached.

On the last class of the semester, students report the result of their negotiation sessions. The class jurists report their decisions on the review of the final permit, as well as their disposition of any pending motions in the enforcement litigations. The remainder of the last class session is spent going over the permitting and enforcement exercises. The instructor presents the issues raised by the draft permit, a critique of the final permit, and a discussion of the advocacy teams' choices in the challenges to the final permit and in the prosecution and defense of enforcement proceedings. Finally, the instructor critiques the decisions of the class jurists and gives his take on the likely outcomes for the problem in the real world.

### III. PEDAGOGICAL RESULTS AND STUDENT FEEDBACK

As with other skills courses, the Environmental Skills class seeks to combine the pedagogical benefits of learning from practice with the efficiency and controlled environment of a mid-sized enrollment classroom experience. Unlike many other simulation exercises, the Environmental

Skills simulation tries to be as interactive as possible—only the initial problem is defined by the instructor, while the subsequent facts are defined by the actions that the students take. Students in the course gain an understanding of the complex interactions inherent in the multicentric, pluralist universe of environmental law practice. As with any challenging second-year course, student reactions have been mixed. Many students welcome the chance to exercise problem-solving skills, but other students feel overwhelmed by the lack of direction and problem definition.

#### *A. Student Experimentation*

Experiential learning, by definition, seeks to foster self-education through an interactive process of experimentation and integration of results.<sup>48</sup> As described by J.P. Ogilvy in his classic text for law externship placements, students must undergo the cycle of “plan-do-reflect-integrate” in order to learn from an active experience.<sup>49</sup> Active learning engages the student in thinking about what action to take—the planning phase.<sup>50</sup> The student must then execute her plan—the “do” phase. In the course of execution, she receives feedback on whether the plan she chose was successful. The final phase of practical learning is the reflection phase; the student compares her plan to the results and identifies ways to improve her planning or execution.<sup>51</sup>

In the Environmental Skills simulation, the two major exercise simulations allow students to engage in the active learning cycle. Both the rulemaking comment—final rule review exercise and the permit—and the enforcement exercise allow this engagement. In the rulemaking exercise, students first plan the arguments to make in their comments. The EPA students must think about how to synthesize and respond to the conflicting comments submitted by their peers and plan to implement a final rule. The commenting students see whether their arguments were successful in persuading the EPA students, reflect on this result, and integrate the result into their plan for the next phase of the exercise—judicial review of the final rule. After students implement that plan, they get to see whether their strategies and arguments successfully convinced the student jurists who decided the final rule challenge. Students engage in the same cycle with the

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48. Alice Y. Kolb & David A. Kolb, *Experiential Learning Theory: A Dynamic, Holistic Approach to Management Learning, Education and Development*, in THE SAGE HANDBOOK OF MANAGEMENT LEARNING, EDUCATION AND DEVELOPMENT 44 (2008).

49. J.P. OGILVY ET AL., LEARNING FROM PRACTICE 5–6 (2d ed. 2007).

50. *Id.*

51. *Id.*

permitting exercise, only the range of alternative actions open to students (particularly in the enforcement exercise) is wide open. As students experiment with various legal tools of enforcement and permit review, they discover what responses each tool draws from their classroom adversaries and the tool's success or failure in achieving results within the exercise's framework.

Like field placements, time limits the amount of planning, doing, and reflecting that can take place in one semester. However, the accelerated timing of the classroom simulations allows for faster feedback in terms of the success or failure of the legal tools chosen by the student advocates. In addition, a classroom simulation, unlike a live-client clinic or an externship placement, allows more freedom to fail for the students. There are no real-world consequences for bad choices made by students. This allows students to experiment by choosing a course of action without the safety net and filter of an externship or clinic supervisor guarding against mistakes that might prejudice a live client. Students get to see the results of their own strategic decisions, not just those strategic decisions that their supervisors agree with.

#### *B. Interactive Peer Review*

Peer assessment promotes reflection and active learning.<sup>52</sup> Students in the Environmental Skills simulation receive two forms of implicit peer review. They form their own teams and work cooperatively on the follow-up exercises (the rulemaking judicial review and the permit enforcement and review exercises). Within these teams, the students discuss and persuade each other as to the appropriate strategic decisions, legal tools, and substantive choices. Students also receive implicit peer review in the form of the reactions of classroom adversaries and jurists. Students representing the other side invariably look for the analytical weaknesses in the papers submitted and do not hesitate to point out these weaknesses in their responsive filings. The student EPA staff responds to the comments in their final rule and final permits, critiquing those student arguments they choose to reject substantively. Similarly, the student jurists provide implicit peer critique when they accept or reject the student advocates' arguments and tools in their opinions.

This peer response takes place in an interactive setting, much like a multiplayer, role-playing game familiar to millennial law students in their

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52. *Promoting Active Learning*, STAN. U., <https://perma.cc/39CH-FDHX> (last visited Dec. 16, 2016).

early twenties. Students become invested in the competitive aspects of role-playing and take the assignment more seriously than warranted; the follow-up papers are only 10% of the course grade. Particularly, in the completely open-ended enforcement exercise, students must apply game theory principles to their strategic choices, anticipating the likely counter moves that their enforcement measures will provoke. This sort of strategic thinking is an important advocacy skill that few law school courses teach directly.

### *C. Student Response*

It is very difficult to come up with an objective measure of outcomes in skills-based learning.<sup>53</sup> Perhaps the best, if imperfect, outcome measurement consists of the students' responses to the Environmental Skills course. These responses take the form of occasional anecdotal responses, alumni response to surveys, and student course evaluations.

Anecdotally, recent alumni often thank the Environmental Skills instructors for the course. In one typical example, a student with a job at EPA credited the Environmental Skills course for preparing her for her job: "I also wanted to say thank you- I'm currently working at the EPA Office of Water, and without everything I learned in Skills, I would have been dead in the water (pun sort of intended)."<sup>54</sup> Needless to say, such anecdotal responses from alumni are hardly a scientific measure of the success of the Environmental Skills course in preparing students for practice.

Another source of alumni assessment is a survey that Pace Law School performed in 2011. Alumni were asked to identify the courses that best prepared them for practice. The Environmental Skills course ranked first among the 64 respondents to the survey. However, many of the respondents had taken an earlier iteration of the Environmental Skills course, which included the statutory and administrative law components and the skills-based exercises but lacked the semester long role-playing aspect of the course as it is currently taught.

Finally, student course evaluation comments represent a form of student self-assessment. Because the written assignments, constituting 80% of the semester grade, were already returned to students before the students completed their evaluations, student evaluations may reflect frustration at not receiving a higher grade. Overall, student evaluations are about evenly split between positive and negative evaluations of the course. Among

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53. See Mary Crossley & Lu-in Wang, *Learning by Doing: An Experience with Outcomes Assessment*, 41 U. TOL. L. REV. 269, 275-76 (2010) (discussing the challenges of outcome assessment in skills-based legal education).

54. Email from Gillian Lyons (Apr. 11, 2011, 12:59 PM) (on file with author).

students who mentioned the role-playing and simulation exercises specifically, students tended to comment negatively. However, these comments did not criticize the structure of the practice-oriented assignments as much as they complained about the lack of individual coaching and guidance. Only one student commented negatively about the semester-long, role-playing aspect of the course. Though, many students complained that particular roles (primarily students in EPA roles) were called on more often in class because EPA had a greater likelihood of being responsible for the materials discussed.

A typical negative comment on the open-ended simulation exercise was:

Either lower expectations of student work product or supply more guidance. We are not professional attorneys yet, we have no experience with the subject-- we are paying our professors to teach and train us, not to make us teach ourselves and not reward growth and progress. Be more of a professor than a judge.<sup>55</sup>

Other students recognized that the lack of specific direction and the need for self-education reflected the realities of the practice of law:

Professor refused to answer questions on approaches to answering the problems. It seems that professor wanted students to understand that nothing is clear cut in the 'real world' and you have to just figure things out. Point taken, however, as an introductory environmental law course, this class turned a number of students off.

There were moments when I wished that I had more guidance on the assignments, but I do understand why we were not given more. While I do think I learned a great deal from having to figure things out on our own, I also think that this might add more stress than what its worth.

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55. Although obviously intended as a criticism of the course, this student evaluation might be better understood as a failure of the professor to communicate (at least to the student) the purpose of the course. As noted by Professor Stuckey, a context-based, problem-oriented approach to legal education aims not at the transfer of knowledge from the professor to the student, but rather at training students to solve problems by teaching themselves—learning how to learn. STUCKEY, *supra* note 11, at 141–46. The Stuckey Report also contains a specific recommendation that teachers should have high expectations. *Id.* at 116–18.

At least one student had a very positive reaction to the open-ended enforcement exercise: “The litigation simulations were also fantastic. I learned more about civil procedure in this class than in 1L. You really learn so much more in a skills class than a typical exam course.”

Nearly all of the negative comments about the semester-long, role-playing aspect of the course were based on the perceived unfairness that students in EPA and environmentalist roles were called on more frequently and at greater depth during class due to the active participation of these institutions in the cases and materials considered during the class lectures. A few students complained that they did not have a sufficient understanding of the roles when they signed up. On the other hand, several students commented favorably on how the semester-long role playing helped them understand the complexities of the statutory–regulatory system of water pollution control. A representative favorable comment was: “One of the reasons I felt that I learned so much in this class was because I felt challenged to come to class not only prepared with the material, but to understand the material in the context of my role in the simulation.”

Quite a few students commented that they felt the course was one of the best preparations for practice that they received in law school. Representative comments include the following:

It was a unique experience in terms of the learning format. The skills taught are invaluable to a young lawyer.

The simulation setting is an effective tool for learning what to expect in practice. The assignments were great learning tools and really put the statute/regulation/case law into perspective.

I was impressed by how much we learned about the CWA by role playing and filing papers.

The course structure and materials immerses students into the CWA in a unique way that not only prepares us to be better independent researchers, but also (I suspect) does more to prepare us for confronting real legal questions as litigators.

It is difficult to generalize from student course evaluations as such evaluations may reflect individual student personalities and success or failure in meeting their own course expectations. However, student feedback on the Environmental Skills course indicates that at least some of the students recognize the practical value of a semester-long, interactive simulation course.

### CONCLUSION

The world of environmental regulation is multicentric, with multiple institutions at both the federal and state level involved in creating rules of environmental protection. It is pluralistic, with diverse groups vying to protect their interests before the institutions that generate and administer environmental law. Second-year law students may be bewildered by the multiple institutions, multiple players, and role of administrative agencies in the formulation and application of environmental regulation. Giving these students semester-long roles within the institutions and interest groups of the environmental law world helps to demystify the cases and problems presented in the class. Engaging students in interactive exercises of real-world environmental law professionals gives students a greater understanding of the disparate roles lawyers play in the administration of environmental regulation. These exercises also give students a chance to develop and hone practical skills, such as strategic thinking; advocacy and responsibility to clients; practical application of procedural devices and rules; and the drafting and preparation of the lawyer's work product.