Lessons for Legal Education from the Engineering Profession's Experience with Outcomes-based Accreditation

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LESSONS FOR LEGAL EDUCATION FROM THE ENGINEERING PROFESSION’S EXPERIENCE WITH OUTCOMES-BASED ACCREDITATION

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I. INTRODUCTION................................................................. 1018

II. OUTCOMES-BASED EDUCATION...................................... 1019
    A. Outcomes-Based Education and Learning Theory........... 1019
    B. The Outcomes-Based Assessment Process...................... 1021
        1. Formulating Statements of Intended Learning
           Outcomes ........................................................... 1021
        2. Developing Assessment Measures............................ 1022
        3. Linking Outcomes to Educational Experiences............ 1023
        4. Discussing and Using Assessment Results to Improve
           Learning............................................................... 1023

III. OUTCOMES-BASED ASSESSMENT AND ACCREDITATION ....... 1024
    A. Outcomes-Based Assessment and Accreditation in
       Engineering.............................................................. 1024
    B. Outcomes-Based Accreditation in Law Schools.............. 1027

IV. THREE LESSONS FROM OUTCOMES-BASED APPROACHES IN
    ENGINEERING................................................................. 1031
    A. Goal Identification and Outcomes Assessment Can Be a
       Catalyst for Curriculum Reform and Responsiveness to
       Changes in the Legal Profession............................... 1032
    B. Outcomes-Based Education Need Not Consider Only Easily
       Measured Knowledge and Skills............................... 1035
       1. Engineering Ethics............................................... 1036
       2. Legal Education Can Also Learn to Assess Ethical
          Development in Law Students................................. 1039
    C. Ambitious, Institutionally Focused Outcomes Assessment

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I. INTRODUCTION

The American Bar Association’s Council of the Section of Legal Education and Admissions to the Bar accredits law schools. As it draws closer to adopting an outcomes-based approach to the accreditation process, legal educators increasingly wonder: what is outcomes-based education? How does accreditation founded on an outcomes-based model work? And will such an approach be a positive development for legal education, a bureaucratic nightmare, or simply a source of more work?

Other professions have already adopted outcomes-based accreditation, and the medical profession, in particular, has drawn the attention of legal educators. Lessons can also be found in other, perhaps surprising, places. In this article we draw three lessons for law schools from the engineering profession’s experience with outcomes-based accreditation. Engineering faculties’ experiences suggest that an accreditation mandate can inspire constructive curriculum reform by forcing faculties to identify overall missions and specific learning goals, by encouraging faculty dialogue about the overall coherence of a curriculum, and by providing a means for continual improvement.

In this article, we are particularly interested in engineering programs’ experiences with teaching and assessing aspects of professional identity formation, such as commitment to life-long learning, conscious attention to ethical issues, and ability to work as a team. In Part II, we provide an overview of engineering programs’ experiences by assessing outcomes in those three areas. In Part III, we address how outcomes assessment might help law faculties meet the all-important, but challenging, responsibility to ensure that law students develop the capacity and willingness to attend to professional and personal ethical norms of the highest
order. In Part IV, we recount our experience importing outcomes assessment into a single course—first-year legal writing—with particular attention to the impact on students’ ability and willingness to learn in collaborative groups and to engage in significant self-assessment of their learning. Together, these sections suggest that outcomes assessment may help law faculties teach, and students learn, the intangible attributes of professional consciousness. We illustrate some ways to teach these attributes and assess whether students are learning them.

II. OUTCOMES-BASED EDUCATION

A. Outcomes-Based Education and Learning Theory

Outcomes-based education in engineering education had its roots in the mid-1990s; however, a paradigm shift in the larger field of education began in the 1980s with the move from a teacher-centered paradigm to a learner-centered paradigm. At the heart of this paradigm shift is “constructivism,” a theory with roots in eighteenth-century philosophers such as Immanuel Kant. In the twentieth century, Lev Vygotsky developed constructivism into a theory about learning within a social structure. Vygotsky’s social constructivist theory was supported by research in the latter part of the twentieth century in how people learn. What we now know about how people learn is that they construct knowledge by building on information and concepts that they already know; that is, researchers have discovered that “students learn by constructing knowledge rather than by receiving knowledge from others.” In addition, they construct knowledge in a community of learners, and the constructed knowledge is impacted by the other learners in the community. Simply put, we cannot assume that if we teach something, students will learn it. The focus, rather, should be on what students are learning, not what we are teaching. This

5. Bransford et al., supra note 3, at 144–51.
6. The constructivist theory also gave rise to (or at least credence to)
constructivist approach required new techniques for assessing student learning, techniques that included assessment as an integral part of teaching in order to better understand what students were learning during the process (formative assessment) and assessment of learning at the end of the learning experience (summative assessment). When summative assessment is based on specific knowledge and skills that we want students to learn, it is called “outcomes assessment.”

Focusing on the learner rather than the teacher has also inspired a more systems-based perspective on our programs and institution because it considers the educational experience from the viewpoint of the student, who moves through an entire program, rather than just the individual courses we teach: “The knowledge, skills, and abilities that students achieve at the end of their programs are affected by how well courses and other experiences in the curriculum fit together and build on each other throughout the undergraduate years.” The systems view requires that we collaborate with all of those involved in educating our students, both in and outside of the curriculum, to provide a coherent experience for students. New outcomes-based accreditation processes, not only for individual programs, but also for institutions as a whole, mesh with the systems perspective. Assessment processes at the course, program, and institutional level must be planned and implemented collaboratively to capture the full picture of what students are learning, what they are not learning, and how we can use assessment data to improve our programs in order to promote learning.

changes in teaching methods, with active learning approaches moving to the forefront. Because of the focus of this article and space limitations, a discussion of changes in instructional methods is not included here.

7. BRANSFORD ET AL., supra note 3, at 139-44.
8. HUBA & FREED, supra note 4, at 7.
B. The Outcomes-Based Assessment Process

Outcomes-based assessment is an iterative process that involves collaboratively articulating what students should know or be able to do at the end of a course or a program, determining how that knowledge and those skills can be measured, using data from that measurement process to understand the level of student proficiency, and using the data analysis to make course and program changes to improve student performance. The process is depicted in the figure below.9

As the figure shows, the outcomes statements are informed by the other steps in the process: the assessment measures, the learning experiences, and the assessment results. Thus, the outcomes are not static but dynamic and will change as culture and constituent needs change.

1. Formulating Statements of Intended Learning Outcomes

Developing and clearly articulating learning outcomes is the cornerstone of the outcomes assessment process and, arguably, the crux of any educational experience. What, exactly, should students know and what should they be able to do at the end of a program?

(or course or certificate)? At the program level, faculty (and important constituents, including employers and alumni) need to establish these outcomes collectively. This process can be a long, divisive, but (usually) satisfying ordeal. The people, culture, and structures of higher education are not conducive to coherence; rather, the natural tendency is for individualism and specialization. It is very common for faculty in higher education programs not to have a collective and coherent view of the program in which they reside. In fact, many groups of faculty have never undertaken a discussion about what it is they want their students to know and be able to do at the culmination of their programs. Thus, collectively establishing the learning outcomes for students is not easy. Some materials that can be helpful during this process are listed below:

- Program mission, vision, values, goals
- Institutional mission, vision, values, goals
- Data from alumni or employer surveys
- Examples of outcomes from similar peer programs
- Individual course outcomes or goals (if they exist)

The program learning outcomes form the basis for the assessment process. They also help to maintain coherence in the program curriculum because all individual course learning outcomes will be linked to the overall program outcomes. And, they inform potential and current students about what they will know when they complete the program and what is important to faculty.

2. Developing Assessment Measures

Once learning outcomes are established, faculty must determine how to measure student proficiency regarding the outcomes. Because outcomes assessment is a continual process, measurements must be considered carefully so that they can be sustained. Faculty and staff, already overburdened with work, especially in times of diminishing budgets, should be able to administer assessment tools and evaluate the resulting data in their available time on an ongoing basis. Assessment measures should include both direct and indirect approaches.\(^\text{10}\) Direct measures involve student work that demonstrates the knowledge or skill articulated in the outcomes (student writing, portfolios, speeches, exams), whereas indirect measures are student or faculty

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perceptions of learning (surveys, focus groups, interviews). Indirect measures alone are generally not sufficient to determine the level of student proficiency.

3. Linking Outcomes to Educational Experiences

In most programs, the educational experiences in which students will gain the knowledge or skills relative to the outcomes already exist and include, for example, individual courses, internships, design competitions, and clinical experiences. However, once learning outcomes are established, faculty must link each outcome back to experiences in the curriculum or co-curriculum where students should gain the knowledge or skill articulated in the outcome. In some cases, faculty might decide that students are not getting enough exposure to one or more outcomes and changes might need to be made, either in individual courses or in experiences outside the classroom.

4. Discussing and Using Assessment Results to Improve Learning

In all outcomes-based education, data from assessment measures should be discussed collectively by the faculty to determine if a minimum level of competency is achieved by most students for each learning outcome. In fact, in the best of all worlds, faculty would develop a threshold for each outcome measure. For example, if the program uses a senior capstone project for evidence of proficiency in one or more outcomes and the project is holistically scored by a group of faculty for the assessment measure, faculty should consider establishing a minimum acceptable passing score and collective performance. Faculty might decide, for example, that they would be satisfied if eighty percent of their students received a holistic score of three (on a five-point scale) on the capstone project. If students do not meet this threshold, the measure should be reconsidered or the preparation for the capstone project should be reconsidered to promote higher performance.

The previous paragraphs have provided a general overview of the outcomes assessment process, a continual process that ensures that students are learning what faculty—and other important constituents—have collectively determined that they should learn. This assessment process also provides a way to continually improve programs by using the analyzed results of assessment.
III. OUTCOMES-BASED ASSESSMENT AND ACCREDITATION

A. Outcomes-Based Assessment and Accreditation in Engineering

In the early 1990s, the Accreditation Board for Engineering and Technology (ABET) established the Accreditation Process Review Committee as a result of a perception of both engineering professionals and educators that the accreditation criteria were too restrictive and were stifling innovation in undergraduate engineering education programs.\(^{11}\) This committee held a series of workshops with the National Science Foundation and industry representatives, and the eventual result was Engineering Criteria 2000 (EC2000), new criteria and a new process for undergraduate engineering program accreditation.\(^{12}\) ABET’s new criteria and process were also influenced by other studies from several bodies engaged in engineering education.\(^{13}\)

ABET’s previous accreditation process had been input-oriented, with a checklist of topics and number of credits for each topic that students were to complete.\(^{14}\) The new process was just the opposite: outcomes-based.\(^{15}\) Although there remained a list of fundamental criteria (eleven total) that all engineering programs, regardless of sub-discipline, would have to meet, each program was free to establish additional, unique program outcomes and educational objectives.\(^{16}\) The rub was that each program was also required to establish an assessment process for all outcomes and objectives, including collecting and analyzing assessment data using both indirect and direct measures and showing that the students in

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12. Id.
15. Id. at 18–19.
the program are proficient in the ABET required outcomes as well as any program-specific outcomes. This entire assessment process also had to be thoroughly documented: if the process and results were not crystal clear to the ABET visitation team, the program risked loss of accreditation.

The paradigm shift in the assessment and accreditation process from reporting inputs to measuring outputs was met with considerable resistance. Most colleges of engineering embarked on a comprehensive professional development process for faculty, a process that provided background, workshops, and outside speakers to help engineering faculty understand the value of outcomes-based assessment and education and how to conduct outcomes assessment. Even a decade and a half later, a few of the old guard in engineering education long for the days when programs were not required to show proof of student learning.

Not all would agree on the value resulting from the change to outcomes-based education in engineering; however, there are some tangible positive results. In 2002, ABET commissioned a study of the impact of EC2000 (the new criteria), dubbed *Engineering Change: A Study of the Impact of EC2000*. The study surveyed engineering programs (including faculty and deans), 1994 alumni of engineering programs (pre-EC2000), 2004 alumni of engineering programs (post-EC2000), and employers. Respondents included 147 programs, 1,243 faculty, 39 deans, 5,494 graduates from 1994, 4,330 graduates from 2004, and 1,622 employers. Faculty reported significant changes in teaching methods (more active learning), ninety percent of the faculty also reported some personal effort in assessment, and more than half reported moderate to significant levels of personal effort in assessment. Perhaps more importantly, all of the ABET required outcomes showed significant differences in regard to self-reported proficiency, with higher proficiency reported in 2004 than in

17. *Id.*
20. *Id.* at 3.
21. *Id.*
22. *Id.* at 4.
23. *Id.* at 5.
1994.\textsuperscript{24}

Other improvements as a result of the change include more variation and innovation in engineering programs\textsuperscript{25} (although this has not been as widespread as hoped), more coherence in individual program curricula,\textsuperscript{26} and more knowledge among engineering faculty about educational theory, instructional methods, and assessment. In addition, although not a result solely of the move to outcomes-based assessment, ties between engineering faculty and those with educational assessment and research backgrounds have grown stronger. Several colleges of engineering now offer graduate degrees in engineering education,\textsuperscript{27} a myriad of research collaborations have come about, and it is not uncommon to find someone with an education background in a college of engineering. The number of rigorous and insightful educational research studies in engineering has increased dramatically over the past two decades.\textsuperscript{28} These relationships and the research that has grown from them have greatly improved the educational experience for engineering students.

As with any change, there have been disadvantages and costs. Although the \textit{Engineering Change} study showed that most faculty did not consider their assessment work overly burdensome,\textsuperscript{29} anecdotal evidence does indicate that some faculty perceive the new assessment requirements as a layer of unnecessary work. In fact, many programs have created a new assessment position (usually an engineering faculty member particularly interested in education), and the position carries with it some type of release from other duties (a course or two, for example).\textsuperscript{30} So there can be real costs

\textsuperscript{24} Id. at 7–8.

\textsuperscript{25} The innovative engineering programs at the newly established Olin College in Massachusetts are an example.

\textsuperscript{26} At both the University of Washington and Montana State University, the new ABET criteria have helped engineering programs maintain coherence because of linked program and course learning outcomes.

\textsuperscript{27} Purdue University, Virginia Tech, the University of California, Berkley, and the University of Utah offer these degrees.

\textsuperscript{28} See, for example, \textit{J. Engineering Educ.}, http://www.jee.org (last visited Nov. 15, 2011), a well-respected, quarterly peer-reviewed journal that, since 2006, accepts only research-based articles.

\textsuperscript{29} \textit{Lattuca et al.}, \textit{supra} note 14, at 5.

\textsuperscript{30} At Montana State University, for example, each engineering department receives from the College of Engineering Dean’s Office one month of summer salary for a faculty member to direct the assessment efforts, including writing the university-required annual assessment plan and assessment report.
Another issue in outcomes-based education, discussed in more detail in the following section, concerns measuring student proficiency. Some of the more important student competencies are the most difficult to measure. For example, all faculty want students to grow into critical thinkers, good communicators, and successful team members. These skills pose measurement challenges. Determining students’ teamwork abilities might require several approximate measures: a self-perception, a peer evaluation, and a direct measure of the tangible deliverable. Even then, there is no guarantee that the student’s skill will transfer to subsequent team projects.

Finally, the actual accreditation process can generate issues. In engineering, many complain about inconsistencies across visiting accreditation teams, with one visit producing a positive result and a visit several years later producing a negative result from the same assessment process and documentation. These problems show that, to be effective, ABET and its visiting teams (made up of engineering faculty and professional engineers) require a huge ongoing professional development effort. This would be the case in any profession or discipline undertaking outcomes assessment, unless the faculties already include people trained in assessment (as in education programs, for example).

**B. Outcomes-Based Accreditation in Law Schools**

Legal education is ten to twenty-five years behind engineering and other professions in adopting outcomes-based education. As noted in a recent American Bar Association (ABA) report, dentistry proposed its first outcomes measures in 1988, and other professions followed, mostly in the past decade.

Individual law schools have incorporated outcomes-based approaches into curriculum reform efforts and a small but

33. University of Montana led the way on this. See generally Gregory S. Munro, *Integrating Theory and Practice in a Competency-Based Curriculum: Academic Planning at the University of Montana School of Law*, 52 MONT. L. REV. 345 (1991) (discussing the
growing body of scholarship addresses outcomes-based approaches to both curriculum development and individual course design. American scholars have begun to address the topic nationally by looking at developments in other countries, by looking at alternative outcomes measures, and by focusing on developing outcomes goals and assessing them in individual courses. In process and difficulties of implementing a competency-based curriculum for law schools. Since that article was published, Montana has adopted the MacCrate Statement of Fundamental Lawyering Skills as their student learning outcomes. E-mail from Gregory S. Munro, Professor of Law, Univ. of Mont. Law Sch., to Deborah Maranville, Dir., Clinical Law Program & Workers’ Rights Clinic, Univ. of Wash. Sch. of Law (Oct. 14, 2011, 10:49 PDT) (on file with author). For more recent examples, see U A Outcomes Assessment: Law, UNIV. OF ARIZ., http://assessment.arizona.edu/law/College%2oda%2dLaw (last updated Sept. 14, 2010) (stating that it assesses the School of Law’s learning outcomes on a number of criteria) and HAMLINE UNIV. SCH. OF LAW, LEARNING OUTCOMES ASSESSMENT THREE-YEAR PLAN 2009–2012 (May 12, 2009), available at http://law.du.edu /documents/assessment-conference/Sandeen-Getting-Buy-In-From-Your-Colleagues.pdf (discussing plans for program-level assessment). The Sturm College of Law at the University of Denver hosted a conference on outcomes assessment in legal education. For the papers and presentations concerning outcomes assessment in law schools, see Legal Education at the Crossroads v. 3: Conference on Assessment, STURM C.L., http://www.law.du.edu/index.php /assessment-conference/program (last visited Nov. 16, 2011). For additional papers, see Law School Outcomes Assessment Report, RENAISSANCE REP.: A J. OF L. EDUC. IN TRANSITION (Nov. 16, 2009), http://web.wmitchell.edu/renaissance-report /2009/11/law-school-outcomes-assessment-report.


addition, law schools are increasingly incorporated into university accreditation processes, which, like professional schools’ accreditations, have moved to outcomes measures.\(^{38}\) Thus, a number of law schools have encountered outcomes measures through the “back door.” Only in 2008, however, did the accrediting body for law schools, the ABA’s Council of the Section of Legal Education and Admissions to the Bar, begin to consider shifting to an outcomes-based approach to accrediting law schools as part of its comprehensive review of the ABA Standards and Rules of Procedure for the Approval of Law Schools.\(^{39}\)

As of March 2012, the ABA Standards Review Committee was still considering\(^{40}\) whether to recommend that the Council adopt new proposed standards that would require law schools to identify and assess student-learning outcomes, provide feedback to students, and measure institutional effectiveness in providing a rigorous legal education.\(^{41}\) The proposed standards both prescribe

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41. The proposed standard for outcome measures is contained in *Standards Review Comm., ABA SECTION OF LEGAL EDUC. & ADMISSIONS TO THE BAR, STANDARDS: DRAFT CHAPTERS 1 TO 7*, ch. 3, Standard 302 (Nov. 2011) [hereinafter POST-NOVEMBER 2011 DRAFT], available at http://www.americanbar.org/content/dam/aba/migrated/2011_build/legal_education/committees/standards_review...
general outcomes required of all law schools and encourage
individual law schools to identify additional mission-driven
outcomes for students. The very general student learning
assessment requirements are specifically interpreted to give law
schools broad flexibility. The standards would not require multiple
forms of assessment in each course. Nor, unlike earlier drafts,
would it impose a requirement that methods of assessment be valid
and reliable. Similarly, the institutional effectiveness standard

42. Id. at 1–2. The text of Standard 302 reads:
Standard 302. LEARNING OUTCOMES
(a) A law school shall identify, define, and disseminate each of the
learning outcomes it seeks for its graduating students and for its program
of legal education.
(b) The learning outcomes shall include competency as an entry-level
practitioner in the following areas:
(1) knowledge and understanding of substantive law, legal theory,
and procedure;
(2) the professional skills of:
(i) legal analysis and reasoning, critical thinking, legal research,
problem solving, written and oral communication in a legal
context; and
(ii) the exercise of professional judgment consistent with the
values of the legal profession and professional duties to society,
including recognizing and resolving ethical and other
professional dilemmas.
(3) a depth in and breadth of other professional skills sufficient for
effective, responsible, and ethical participation in the legal
profession;
(4) knowledge, understanding and appreciation of the following
values:
(i) ethical responsibilities as representatives of clients, officers
of the courts, and public citizens responsible for the quality and
availability of justice;
(ii) the legal profession’s values of justice, fairness, candor,
honesty, integrity, professionalism, respect for diversity, and
respect for the rule of law; and
(iii) responsibility to ensure that adequate legal services are
provided to those who cannot afford to pay for them.
(5) any other learning outcomes the school identifies as necessary or
important to meet the needs of its students and to accomplish the
school’s mission and goals.

43. Proposed Standard 305, Assessment of Student Learning, states only: “A
law school shall apply a variety of formative and summative assessment methods
across the curriculum to provide meaningful feedback to students.” Id. at 8.
44. Id. at 8 (Interpretation 305-2). For a discussion of the evolution of the
proposed standards, see Memorandum from Richard K. Neumann, Jr., Prof.,
Hofstra Univ. Sch. of Law, & Roy Stuckey, Prof. Emeritus, Univ. of S.C. Sch. of
gives law schools broad latitude to choose for themselves what measures they wish to adopt for evaluating effectiveness. The proposed standards do not represent a wholesale shift toward measuring outcomes. They continue to require some specific inputs, both in terms of curriculum—professional responsibility, legal writing, professional skills, and opportunities for pro bono work—and quantity of required instruction. The details of any such requirements continue to be controversial with those who have lobbied hard for deregulation, such as the American Association of Law Deans (ALDA). The fight over the appropriateness and content of any input measures is mirrored in controversies over how rigorous outcomes assessment requirements should be.

IV. THREE LESSONS FROM OUTCOMES-BASED APPROACHES IN ENGINEERING

In this section, we discuss three lessons that law faculties might learn from engineering programs’ implementation of outcomes


45. Proposed Standard 306: Institutional Effectiveness provides:
   In measuring its institutional effectiveness pursuant to Standards 202 and the rigor of its education program pursuant to Standard 301, the dean and faculty of a law school shall:
   (a) conduct regular, ongoing assessment of whether its learning outcomes, curriculum and delivery, assessment methods, and the degree of student attainment of competency in the learning outcomes are sufficient to ensure that its students are prepared to participate effectively, ethically, and responsibly as entry level practitioners in the legal profession; and
   (b) use the results of this review to improve its curriculum and its delivery with the goal that all students attain competency in the learning outcomes.

POST-NOVEMBER 2011 DRAFT, supra note 41, at 8–9.

46. Id. at 5–8 (providing Standard 304: Curriculum).

47. Id. at 11–14 (providing Standard 309: Course of Study and Academic Calendar).

48. Memorandum from the ALDA Board of Directors to Bucky Askew (July 14, 2010), available at http://www.americanlawdeans.org/images/ALDA_comment2010.pdf. The Comment generally commends the ABA for moving from input-based standards to outcomes-based standards but then argues for a reduction in the number and specificity of outcomes—in part to maintain diversity among and flexibility within law schools. Id. at 1.
assessment. First, the process of goal identification and assessing progress towards those goals can be a catalyst for curriculum reform. The iterative process of revisiting the curriculum in light of what is learned through assessment can also provide a counterweight to the centripetal tendencies that befall any curriculum reform effort. Second, an outcomes-based approach to education can encourage our students' ethical development and professional formation. Third, while a systemic, institutional focus on outcomes has the potential to be transformative, even a less ambitious, classroom-focused outcomes effort can have positive results.

A. Goal Identification and Outcomes Assessment Can Be a Catalyst for Curriculum Reform and Responsiveness to Changes in the Legal Profession

First, we note the obvious—that a mandate from the ABA to assess outcomes has the potential to stimulate curricular definition and improvement at law schools. In fact, the mandate may help break down some of the obstacles to curricular reform.

As many law teachers and deans know, achieving and maintaining meaningful curricular improvements can be very difficult. Despite significant additions—especially in the expansion of clinical programs and, to a lesser extent, legal writing programs and other simulated skills courses—the “core” curriculum has been remarkably stable in focusing on doctrine, using the case method, and assessment via a (single) final exam.\textsuperscript{[49]} A mandate to assess outcomes will not remove the controversies that may accompany an attempt to define a school’s mission, but if such a mandate is enforced in a meaningful way, it will force faculty to make choices that are often postponed in the face of controversy.

The methodology of outcomes assessment enables faculties to think systematically about curricula without necessarily adopting a single vision of what a legal education should provide across different programs or schools. As the engineering schools’ experience illustrates, an outcomes-based approach enables schools, and programs within schools, to set their own goals and then measure how well they are achieving them. One-size-fits-all national recommendations can create more controversy than improvement because they can threaten academic freedom within

given faculties and because the diversity of school resources, and
student and employer demographics, can make them impracticable. To give a simple example, the debate within law faculties about whether legal education should be preparation for participation in a profession or whether it should be preparation for participation in an academic discipline does not have to be resolved in the same way by each school. An outcomes-based approach allows a school to pick one or the other, or some combination of, missions.

Thus, a focus on outcomes allows law schools to diversify their missions and to design appropriate programs for students with different needs and goals while still undertaking a serious evaluation of whether the mission is being accomplished. Even within a given school, outcomes assessment permits competing visions of what a legal education should impart to co-exist so that, for example, different components of a curriculum could address theory, politics, doctrine, ethics, and skills. In principle, assessment of graduates’ careers and personal satisfaction could inform schools about the appropriate mixture of all those components in the education of a given student. That is, outcomes assessment could provide empirical data that might be useful in resolving what sometimes seem to be intractable ideological disputes within faculties.

Second, we also observe that outcomes assessment might be a way for schools to adapt deliberately to what seems to be a rapidly changing economic environment for law-trained persons. For example, if a given school decides that value-added for its student demographic means instruction that enables competence in types of practice that are unlikely to be outsourced to less expensive law-trained persons in other countries—or to computers—the school can set that as a goal. If, on the other hand, a school decides that value-added for its students means training in structuring large, multi-jurisdictional organizations, then the school can identify that outcome. These schools would likely have quite different curricula. We can see hints of what attention to markedly

different missions and what those differences might mean for the curriculum in recent curriculum reform efforts at, among other schools, Columbia, Berkeley, Gonzaga, Harvard, Indiana, Ohio State, and Vanderbilt.\(^{52}\)

We do not suggest that curricular transformation at every law school is an inevitable result of new outcomes-based accreditation standards. As noted above, to a significant extent, the draft student learning and institutional effectiveness standards would permit law schools to determine for themselves the criteria and methods under which they would be accredited. Mission, learning objectives (to some extent), methods of assessment of student learning, and approaches to evaluating institutional effectiveness are all within the discretion of the institution. We expect that some schools will be inspired to take the process seriously and that, in doing so, curricular transformation would be a likely result. And, no doubt, others will simply try to skate by. Nonetheless, market forces in both legal education and the legal profession are likely to create incentives to take the outcomes-based process seriously.\(^{53}\)

The combination of high tuition, massive debt loads, a challenging job market, and an increasingly bifurcated salary profile for law school graduates, in which perhaps twenty-five percent of law school graduates find high paying Big Law and similar jobs, while most graduates earn salaries of perhaps one-quarter to one-half as much, may force law schools to think more seriously about outcomes. If, as some predict, structural changes in the legal profession will make high-paying, readily available jobs a thing of the past for law school graduates, outcomes-based approaches will receive yet another boost.

Even if the ABA standards only mandate outcomes assessment at or shortly after graduation, we think that such a standard will actually encourage, perhaps even require, assessment of each year

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53. The University of Washington is in the planning process for a “Grand Challenges” workshop that will address the confluence of these developments.
and of each major component of each year. If final assessment is taken seriously, it will require faculties to “look under the hood” of the curricula in each year and ultimately in each course to find the source of mastery or deficiency in student achievement of any stated outcome. Thus, we suspect that even if outcomes are formally assessed only at the end of a J.D. program, the process will have a granular effect on the construction of each year of the program and of each course within that year. Therefore, we think an accreditation standard requiring outcomes assessment at or shortly after graduation will push faculty, individually and collectively, to articulate overall outcomes for students in the program and to identify in some detail how the content and sequence of (required) courses contributes toward achieving that goal. And, of course, the requirement to assess and to respond, if enforced, means that goals can be revised and curricular improvement will be ongoing.

We expect that critics of legal education will have many opportunities to say “I told you so” as outcomes-based assessments are implemented and law schools face the reality of what many students have not learned during their sojourn in the legal academy. At the same time, we know that many law students learn and even thrive in law school. So, the lesson of outcomes-based approaches to institutional change such as Appreciative Inquiry,\textsuperscript{54} will be important; building on what we are already doing well can be a powerful strategy for change.

\textbf{B. Outcomes-Based Education Need Not Consider Only Easily Measured Knowledge and Skills}

Critics of outcomes-based approaches to accreditation express understandable concern that a process that focuses on outcomes can too easily lead to an exclusive emphasis on content knowledge or skills that are easy to measure. Certainly similar concerns have been salient in the context of K–12 education and “No Child Left Behind,”\textsuperscript{55} with its emphasis on standardized testing. Nor should we dismiss concerns about the perils of “teaching to the test” or creating incentives to “game” the system. Certainly, the much-


maligned *U.S. News* law school rankings have led law schools to engage in just these types of behaviors. The experience of engineering, however, tells us that these negative consequences need not be the “outcomes” of an outcomes-based accreditation process. More specifically, a second lesson from the engineering profession’s experience with outcomes-based accreditation processes is that ethics, metacognition, and other professional skills too often denigrated as “soft” can be included in an outcomes-based assessment of student learning.

1. **Engineering Ethics**

In engineering, the ABET EC2000 accreditation criteria and outcomes-based process required eleven fundamental engineering competencies for all programs—and these competencies remain in the current accreditation criteria. The required outcomes are listed below in order to show some of the similarities with legal education:

[Engineering programs must demonstrate that their students attain the following outcomes:]

(a) an ability to apply knowledge of mathematics, science, and engineering
(b) an ability to design and conduct experiments, as well as to analyze and interpret data
(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
(d) an ability to function on multidisciplinary teams
(e) an ability to identify, formulate, and solve engineering problems
(f) an understanding of professional and ethical responsibility
(g) an ability to communicate effectively
(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context

---

(i) a recognition of the need for, and an ability to engage in, lifelong learning
(j) a knowledge of contemporary issues
(k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

Some of these outcomes are easier to assess than others. For example, outcome (a) (and a few others) can be directly measured by requiring senior engineering students to take the Fundamentals of Engineering Exam (FE). Others are much more difficult. When EC2000 was adopted, very few engineering programs included any content about engineering ethics in their curricula; neither did they have a way to give students a learning experience involving a multidisciplinary team nor had they given much consideration to a conscious effort of encouraging lifelong learning. Creating opportunities for students to learn the professional skills required in the (a)–(k) outcomes above and assessing competence in these skills have caused problems for engineering educators, but the eventual result has been a much richer educational experience for students.

In this section, we focus on ethics, not only because of the difficulty in designing related educational experiences and accompanying assessments for engineering students, but also because ethics is a major concern for law students. Engineering ethics have come to the attention of the general public in recent decades because of major design disasters, including the Ford Pinto, the Challenger, the Three Mile Island Nuclear Power Plant, Chernobyl, and the Hyatt Regency walkway collapse in Kansas City. Not as visible, but perhaps just as important, are the day-to-day ethical dilemmas engineers face. All design problems involve trade-offs among cost, scheduling, and product quality. Engineers are constantly making decisions about cutting corners, either on costs or time, and the amount of risk involved, either for products or users. In addition, there are ethical issues involved with client relationships, as there are in any professional activity.

A 2005 article in the Journal of Engineering Education questioned whether the professional skills discussed above could be taught or assessed, and also offered instructional and assessment

57. Id.
59. Larry J. Shuman, Mary Besterfield-Sacre & Jack McGourty, The ABET
approaches. For example, in regard to ethics, the 2005 article cites the success of the University of Virginia in using case studies to teach engineering ethics.\(^{60}\) Teaching engineering ethics is one dilemma; assessing student proficiency in the “understanding of professional and ethical responsibility,”\(^{61}\) a priori is another challenge altogether. Shuman et al. have developed a rubric for assessing students’ proficiency in solving ethical dilemmas,\(^{62}\) but they admit that it is difficult to tell whether student performance as measured by the rubric would transfer to performance in a real ethical dilemma on the job.

To address the EC2000 requirement for student understanding of ethical responsibility, engineering programs have taken a variety of approaches. Some programs have added a stand-alone course in ethics,\(^{63}\) some have added a course in professional skills that includes ethics as one component,\(^{64}\) and others have added an ethics module to an existing course.\(^{65}\) A few have also required students to take an ethics course outside the engineering college. One study compared two approaches to teaching engineering ethics: (1) a module or cases embedded into an existing course or courses and (2) a stand-alone course devoted to

\(^{60}\) \textit{Id. at 46 (“[C]ases promote active learning, team-based activities, and the ability to deal with open-ended problems.”).}

\(^{61}\) \textit{Id. at note 56, at 3.}

\(^{62}\) \textit{Larry J. Shuman et al., Can Our Students Recognize and Resolve Ethical Dilemmas?, PROCEEDINGS OF THE 2004 AMERICAN SOCIETY FOR ENGINEERING EDUCATION ANNUAL CONFERENCE \\& EXPOSITION (2004), http://search.asee.org/search/fetch\?sessionId=6f8g8p3ieg2e2u=url\%3A\%2F\%2Flocalhost\%2FE\%3A\%2Fsearch\%2Fconference\%2F28\%2F2004Paper\%20.pdf\&index\%3A conference\_papers\&space=129746797203657471716676178\&type=application\%2Fpdf\&charset=.)}

\(^{63}\) At Montana State University, for example, the computer science department added a course addressing ethics. \textit{See Social \\& Ethical Issues in CS, MONT. ST. UNIV., http://www.cs.montana.edu/course/csci215 (last visited Nov. 14, 2011).}

\(^{64}\) The Electrical Engineering program at Montana State University, for example, has developed a class in professionalism, ethics, and engineering practice. \textit{See Professionalism, Ethics and Social Responsibility Course Description, MONT. ST. UNIV. C. ENGINEERING (May 2009), http://www.coe.montana.edu/ee/info/PDF/ee495_ABET_syllabus_09.pdf.}

\(^{65}\) \textit{E.g., Matthew J. Drake et al., Engineering Ethical Curricula: Assessment and Comparison of Two Approaches, 94 J. ENGINEERING EDUC. 223, 223 (2005) (noting that one common approach to teaching engineering ethics is the incorporation of modules into existing courses).}
engineering ethics. Students’ competence in ethics from both instructional approaches was measured by an instrument developed by Kohlberg, which produces an index of moral reasoning. The study found that a limited module on ethics was not sufficient to make an impact on moral reasoning skills of students and recommended a minimum of three weeks of ethics study. The Kohlberg instrument offers a second possibility for assessing ethics (in the form of moral reasoning).

The Shuman rubric and the Kohlberg instrument offer two assessment methods for engineering ethics. Other programs have designed specific tests that have passed the scrutiny of ABET. For example, Chemical and Biological Engineering at Montana State University uses the score on a test following an ethics case study in the senior capstone sequence. Other indirect methods include surveying or interviewing graduating seniors or alumni (as a retrospective view). In addition, employers can be queried about student preparation in the ethics arena. An indirect method bolstered by a score from a direct assessment method would provide a richer understanding of student competency.

The study mentioned earlier on the impact of EC2000 did find a significant difference between 1994 and 2004 on the ethics outcome—in fact, this effect was one of the larger effects measured in the study. So, although the effect cannot be directly ascribed to EC2000, changes in engineering education over the ten-year period are having an effect on student learning in engineering ethics, despite the difficulties in developing instructional approaches and assessing student proficiency.

2. Legal Education Can Also Learn to Assess Ethical Development in Law Students

Like engineering schools, law schools have struggled with the challenges of teaching ethics and debated the merits of stand-alone courses versus infusion across the curriculum. The experience of engineering provides support for the views both that outcomes-

66. Id.
68. Drake et al., *supra* note 65, at 229.
69. See infra Appendix A.
70. See Lattuca et al., *supra* note 16, at 8–9.
based accreditation need not undermine the current move to focus on development of an ethical professional identity and that approaches to assessing ethical development may be attainable. Those views are supported by the vibrant current efforts by legal educators to develop students’ professional identity in a more intentional way and to develop effective approaches to developing our students’ ability to recognize and respond to ethical problems and to measure the results.

C. Ambitious, Institutionally Focused Outcomes Assessment Approaches Are Desirable, but Even Course-Focused Outcomes-Based Approaches Can Generate Useful Reforms

As Part III.A suggests, a broad, institutionally focused outcomes-based assessment of an educational program can generate significant improvements to student learning, and we are cautiously optimistic that outcomes-based accreditation measures will have that effect in legal education. At the same time, we know that outcomes-based accreditation will not arrive overnight. Thus, we think it important also to emphasize a more modest lesson from one effort to transplant lessons from engineering into the design and assessment of a legal writing program: course-based efforts to identify learning goals in a systematic way and assess student learning outcomes can improve student learning, even though such efforts are difficult to sustain in the absence of significant institutional support. To illustrate that lesson, we share the following experience.

V. CASE STUDY

At the University of Washington School of Law, Carolyn Plumb, Kate O’Neill, and Kathleen McGinnis collaborated on a pilot legal writing program that imported an outcomes-based approach from the engineering writing program at the University


of Washington. That experience illustrated the value to teacher and students of a rigorous effort to articulate learning goals, to identify the pedagogies for each goal, and to design assessment tools to measure student mastery of each goal. Our experience also provides some cautionary lessons about the difficulty of adopting outcomes assessment in an isolated course without significant support from the rest of the faculty and administration.

For now, we will summarize just four benefits the outcomes-based approach brought to the legal writing program. First, it helped the faculty understand the course goals better and integrate learning theory in selecting appropriate pedagogies and assessment tools. Second, the approach helped faculty and especially students move away from focusing so heavily on the quality of (or the grade on) the end product and move toward the component knowledge and skills that each student needed to master in order to produce an end product. Third, the course helped students learn to collaborate with each other. Finally, it helped the faculty see that two long-standing course goals—oral and written advocacy—were simply inappropriate given the timing of and credit hours for the course.

Defining course goals in terms of their components was a very valuable and eye-opening exercise, even for experienced legal writing teachers. We have attached a list of the program goals and learning objectives.

This list resulted from weeks of work in which Plumb, who was familiar with learning theory and with outcome assessment, worked with O’Neill to identify the particular knowledge and skills that went into some general goal like “writing a law office memo.” The list allowed us to think carefully about how and when components might be learned and how and when they would be assessed. This allowed us to think about efficient ways to teach and assess and how to provide feedback to students that could be more meaningful than even detailed comments on a

73. An unpublished description of the program and assessment techniques and outcomes is available upon request from authors Carolyn Plumb and Kate O’Neill.

74. See infra Appendix B.

75. See, e.g., Lori A. Roberts, Assessing Ourselves: Confirming Assumptions and Improving Student Learning by Efficiently and Fearlessly Assessing Student Learning Outcomes, 3 DREXEL L. REV. 457 (2011) (discussing the need to analyze assessment results carefully and giving, as an example, the information gleaned from disaggregating components of an overall assessment measure—like the score on a quiz—to see what percentage of students actually learned a particular skill).
large-scale product, such as a memo, might be.

It is worth noting that this list of course goals might be instructive not just for teachers of the course and their students, but also in generating broader conversations about the first-year curriculum in a law school. A quick review of the list of learning objectives would, we think, persuade many faculty to think that such a course was incredibly complicated and involved multiple, not necessarily closely-correlated, skills. It might give faculty as a whole—and not just legal writing faculty who may already feel this way—a foundation for serious consideration of the credit loading and timing of such a course. It might also generate interesting conversations about why certain elements of the course—such as the legal system—have been assigned to the legal writing course.

The second benefit of the redesign was that it helped us focus on building student reflection and self-assessment capacities.76 It requires students to rate their sense of mastery on a scale of one to three, and, most importantly, it invites them to select work product that demonstrates their improvement or mastery of the course goal. Thus, even assignments that had been graded or commented upon by the teacher earlier in the course became the object, once again, of reflection and perhaps even revision.

The third achievement was the course’s success in building teamwork capacities among the students—even among many who self-assessed at the start of the year as uncomfortable or even critical of collaborative work. In part, this effort was the child of necessity. In the year in which we launched this pilot, we were facing a sudden shortage of full-time faculty to teach the course. Peer-group collaboration and feedback were essential because we lacked enough teachers to teach small sections that were often scheduled at the same hour. As a result, we were stimulated to think about which course goals had to be met by larger class lectures and the like and which course goals could be accomplished by structured peer-group activities.

Happily, the switch to peer-group work in the classroom was also positively warranted by learning theory that indicated that a group of adult learners would benefit from a learner-centered approach, rather than a teacher-directed approach, that would allow them to build their capacities in the discourse community by

76. Please see Appendix C for an end-of-year self-assessment. You will see that it correlates with some of the course goals laid out in Appendix B.
articulating their ideas and hearing how others responded. In any event, this theory counseled that learning objectives that depended upon students learning to express themselves within the discipline were best accomplished by structured peer-group exercises in which students would work in small groups to construct the solution or solutions to a task designed by the faculty. This not only helped students learn to fashion arguments and to support them with appropriate authority, for example, but it simultaneously taught the skills of communicating effectively and collaborating with people who had different perspectives and skills coming in to the collaboration.

In Appendix D we have attached selections from a student’s end-of-year self-assessment. This and our aggregate analysis of student responses show that students significantly increased their appreciation for, and their internal sense of, competence at collaborative work.\textsuperscript{77}

\textsuperscript{77} Here is an example of the data we collected and Plumb’s analysis:
In the self-assessments, we asked students to rate their “ability to collaborate with peers in a group problem-solving process.” In autumn quarter, 4\% of students rated this ability as “minimal,” 42\% as “reasonable,” and 54\% as “very good.” In spring quarter, those numbers had changed, respectively, to 2\%, 29\%, and 69\%. We also asked them: “Has your ability to collaborate changed in any way this year?” A majority of students commented that their ability to collaborate had either changed (for the better) in some specific way(s) or that their appreciation for collaboration had increased. Below are some specific examples of student comments:

- I have never really enjoyed working in a group. This year that has changed. Both BLS and having a study group have enabled me to learn from and contribute more effectively in a group learning environment. I have learned to be honest, clear, gentle, and patient in the process. I have also realized the immense need for more than one brain to tackle some of these issues.
- [As the year progressed, we all took collaborative work more seriously, and I learned to trust other students.]
- My ability to collaborate with peers has improved over the year. This has been true inside the classroom but especially outside, where I have mentally and orally worked through issues and problems with others more than any time in my life. . . . In the beginning of the year, I felt quite hesitant to express my opinions in groups—feeling quite insecure about what might be in my own brain or perhaps lacking a thought altogether—but picking up during second quarter, I have been able to be an active participant in all kinds of group efforts and can work through issues orally with my peers in a positive, stimulating, helpful manner.
- My ability to collaborate has not changed this year (that I know of), but my understanding of the value of collaborating has changed.
The fourth benefit of this outcomes-based approach was external assessment evidence that appellate advocacy skills could not be effectively learned by most students in this course in the first year with the number of credits assigned. The writing faculty had long intuited this, but the course redesign allowed us to collect empirical data to confirm the intuition. One of the mechanisms that allowed us to confirm our intuition is that we invited non-legal writing faculty to read first-year briefs. The results showed that

- I have always preferred to work alone and not to collaborate at all, but this year some of the best learning moments have been the result of collaboration with peers, and I am realizing how valuable successful collaboration really can be for all involved.
- My ability to collaborate has not changed, but my appreciation for its importance, especially in relation to the field of law has only intensified.

Our pre- and post-course survey asked students to rate the effectiveness of various pedagogies in helping them learn, and the two methods that related to groups, group activities in class and study groups outside of class, were both rated higher after the course than before the course. The changes in ratings are shown below, with the autumn numbers on the top and the spring numbers on the bottom. The numbers represent the percent of students who responded with that rating:

<table>
<thead>
<tr>
<th></th>
<th>Not effective</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Very Effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group activities in class</td>
<td>13%/6%</td>
<td>31%/26%</td>
<td>33%/34%</td>
<td>20%/28%</td>
<td>3%/6%</td>
</tr>
<tr>
<td>Study groups outside of class</td>
<td>3%/6%</td>
<td>16%/15%</td>
<td>36%/27%</td>
<td>33%/33%</td>
<td>12%/29%</td>
</tr>
</tbody>
</table>

Thus, at the beginning of the year, 56% of the students rated group activities in class as 3, 4, or 5 on the scale, while at the end of the year, 68% of students rated group activities on the “effective” end of the scale.

Comments from student end-of-year course evaluations also showed an overall positive response to the small group activities. Some students commented that they wanted more time for these activities (and less time in big lecture), and some commented that the most successful workshops were those that were carefully designed to produce some sort of product that related directly to the current assignment.”

68. Six School of Law faculty who do not teach BLS agreed to look at a random sample of student work and holistically evaluate the sample in regard to a subset of the course learning outcomes. After the sample was chosen, three of the sample papers were used for orienting the reviewers to the process. These sample papers were sent to the reviewers with the evaluation rubric, then the entire group met with a facilitator to discuss their evaluations of the three papers. This process generally helps to calibrate reviewers’ evaluations so that they are more consistent.
students were able to identify issues and synthesize rules of law—the skills that the earlier work in the course had emphasized—but the external reviewers’ evaluations made clear that students needed much more practice before they could master the procedural issues effectively in an appeal, much less the particular organizational and stylistic techniques of effective argumentative writing. As a result, that component of the course was excised. Students who are interested may pursue upper level electives in advocacy and participate in moot court exercises.

In the end, adoption of an outcomes-based approach in the first-year writing course improved the course goals and showcased the value of certain pedagogies, but it proved difficult to maintain a rigorous outcomes-based approach in subsequent years. At least one reason was that we had not first obtained sufficient buy-in from faculty. The impetus for the approach came from O’Neill, the director of the program, not from all faculty who taught the course and not from the faculty as a whole. She had three immediate concerns. She felt that the older model of the course was not serving all students well, that it was extremely labor-intensive for faculty, and that, in the short term, the school did not have enough experienced instructors to staff the old model effectively. However, when non-participating faculty returned to teaching the course, they were startled and sometimes confused by the changes. As a result, there was some disunity and confusion in implementation, which students perceived and which made some very anxious. In the meantime, a dean who had been reasonably supportive of the new program left, and a new dean, who had no information about the reasons for the approach, was not as

Each reviewer then evaluated eight briefs, and each brief was evaluated by two reviewers. The evaluation results showed that approximately 12% of the briefs were weak, and approximately 18% were strong, with the remainder in the competent range. We found it encouraging that the highest-rated specific skills in the papers were the ability to recognize legal issues and the ability to identify and synthesize relevant rules of law from one or more primary legal authorities. On the other hand, the scores suggested that students’ ability to work effectively with issues and rules needs increased attention. The lowest skills were the ability to employ effective organizational techniques and the ability to write clear and concise paragraphs supporting and evaluating the components of a conclusion of law. (This information is included in an unpublished report available from the authors.)

79. For more information on the pilot program, see Kate O’Neill, A Silk Purse from a Sow’s Ear? Or, the Hidden Value of Being Short-Staffed, 15 PERSPS.: TEACHING LEGAL RES. & WRITING 12 (2006).
supportive. In deference to faculty academic freedom and teaching styles, and in response to student pressure, some aspects of the course reverted to the older, small-section, teacher-led model; although the good news is that many of the pedagogical innovations and improvements persist, including the emphasis on collaborative learning, self-assessment, and the elimination of appellate advocacy. The cautionary lesson is that a significant outcomes-based effort should have buy-in from all stakeholders before it is undertaken, the rationale for it needs to be explained to every entering class—and to new faculty and administrators—and it would probably be better to implement outcomes assessment systemically—if not through the whole law school, at least through any given year.

The more encouraging conclusion, however, is that all the work that went into identifying learning goals and thinking about assessment tools has been preserved. We think our pilot effort provides a starting point for conversations about learning goals across the first year.

VI. CONCLUSION

Even a law school that adopts a mission of preparing its students for practice and takes that mission seriously can only do so much. Being a lawyer is enormously challenging, and an excellent lawyer will learn and develop over a lifetime without exhausting the possibility for more growth. Thus, we suspect that the most important result of a serious outcome assessment effort might be to help faculties focus on inculcating life-long learning capacity and self-assessment—the metacognitive skills so beloved of learning theorists. Those skills bring us back to the Apprenticeship of Professional Identity that was such a central focus of the Carnegie Foundation’s Educating Lawyers. 80 If we can help students form a robust and ethical professional identity, we will have provided the foundation for a successful outcome.

80. See SULLIVAN ET AL., supra note 49.
Major: Chemical Engineering

Department Mission
The mission of the Department of Chemical and Biological Engineering is to:

- Serve the State of Montana and the nation through education, research and service to meet the mission of Montana State University and the College of Engineering while encouraging diversity in the student population.
- Provide B.S., M.S. and Ph.D. ChE degree programs and contribute to interdepartmental M.S. and Ph.D. degree programs.
- Be recognized by colleagues in industry and other institutions as possessing excellent undergraduate and graduate programs in defined areas of specialization.
- Maintain a professional faculty who
  - Maintain expertise through continued professional development.
  - Provide excellent teaching.
  - Provide excellent advising.
  - Are nationally competitive in research.
- Provide state-of-the-art facilities in support of Department and interdepartmental degree programs.
- Develop and disseminate new knowledge through research.
- Provide opportunities, including cooperative education, for students to augment their career orientation through interaction with regional and national industry professionals.

Approved April 2005 (formerly called “Goals” of the Department)

Degree (Program) Objectives
The Degree Objectives are termed Program Objectives in the terminology of our accreditation agency, ABET. Our Program Objectives were proposed by our Departmental Advisory Committee and student representatives, and adopted by the faculty on February
Our graduates:
- will be confident in their ability to apply chemical engineering fundamentals.
- will be proactive problem solvers.
- will pursue lifelong learning.
- will be effective communicators.
- will be effective team members.
- will be highly ethical engineering professionals.

**Expected Competencies**
In the terminology of our accreditation agency, the expected competencies are termed Program Outcomes. ABET requires 11, and programs are allowed to add others, or regroup and rephrase ABET’s required outcomes. We have elected to simply use ABET’s outcomes A through K as our Program Outcomes.

Our graduates will have:
A. An ability to apply knowledge of math, engineering, and science.
B. An ability to design and construct experiments.
C. An ability to design a system, component, or process.
D. An ability to function on multi-disciplinary teams.
E. An ability to identify, formulate, and solve engineering problems.
F. An understanding of professional and ethical responsibility.
G. An ability to communicate effectively.
H. The broad education necessary to understand the impact of engineering solutions in a global and societal context.
I. A recognition of the need for and ability to engage in life-long learning.
J. A knowledge of contemporary issues.
K. An ability to use techniques, skills, and modern engineering tools necessary for engineering practice.

**Additional Goals**
It is also our goal to:
- Provide a valuable and useful educational experience to our students.
- Provide excellent instruction.
• Create a “student-friendly” environment.
• Provide state-of-the-art experimental and computational facilities.

Assessment Management Structure
Our assessment plan is based on three types of assessment:

1. Inputs Assessment
   Our primary inputs are the design of our curriculum, and the design of our courses. These are reviewed once every three years.

2. Outcomes Assessment and Review
   Our outcomes are the “A-K” outcomes prescribed by ABET. Outcomes are understood to be measurable capabilities at graduation.
   a. Direct Outcomes Assessment
      We monitor particular scores from various items in the program that reflect student ability relative to particular outcomes. These scores are reported annually and monitored. Changes in the scores prompt an inquiry by the faculty.
   b. Summative Outcomes Assessment
      Particular assignments that reflect student ability relative to particular outcomes are collected periodically (once every three years) and assessed by a subset of the faculty using scoring rubrics. The results are assessed by the faculty.

   The faculty assessment of student performance on outcomes is reviewed by the Department Advisory Committee (DAC).

3. Objectives Assessment
   Program objectives are understood to be desirable traits in our graduates in the years after graduation. These are assessed periodically using input from alumni and employers (alumni surveys, employer surveys.) Survey data is collected annually, and assessed by faculty once every three years.

   The faculty assessment of student performance on outcomes is reviewed by the Department Advisory Committee (DAC). The program objectives are also reviewed by the faculty and DAC
every three years, and updated as needed. When updated, all constituents (alumni, employers, faculty, students) have an opportunity for input.

The assessment process is divided over a three year cycle to manage workload.

Assessments

1. Inputs Assessment

Each course is reviewed at least once every three years. The course inputs (syllabus, course outcomes, handout materials) are reviewed by the faculty with immediate feedback. The instructor “closes the loop” by describing what changes (if any) will be made to the course as a result of the assessment process.

2. Outcomes Assessment

We use direct measures of student performance to continuously monitor performance on outcomes, and periodic assessments of selected student work examples to document performance.

   a. Direct Outcomes Assessment

   Particular data points are collected annually and
monitored (actually, graphed). A decline in average (normalized score falling below 75%) or increase in standard deviation prompts an inquiry by the faculty. The following items are monitored:

A. an ability to apply knowledge of mathematics, science, and engineering
   Indicator: FE Exam pass rate
   Indicator: technical score on the CHBE 412 design report.

B. an ability to design and conduct experiments, as well as to analyze and interpret data
   Indicator (design experiments): Scores on Experimental Plans in CHBE 442
   Indicator (conduct, analyze and interpret): Scores on CHBE 443 final reports

C. an ability to design a system, component, or process to meet desired needs
   Indicator: CHBE 411 design report rubric section (“Does the proposed design represent a viable solution to the stated problem?”)
   Indicator: CHBE 328 PFR design exam problem

D. an ability to function on multi-disciplinary teams
   Indicator (teamwork): Standard deviation of teamwork score in CHBE 411
   Indicator (multi-disciplinary): ENGR 310 final grades or ENGR 310 assessment

E. an ability to identify, formulate, and solve engineering problems
   Indicator: Homework scores in CHBE 323
   Indicator: Quiz scores in CHBE 424

F. an understanding of professional and ethical responsibility
   Indicator: Score on ethics case studies portion of CHBE 412
   Indicator: fraction of students participating in AIChe

G. an ability to communicate effectively
   Indicator: “Global” score on CHBE 443 reports
   Indicator: Oral presentation score in CHBE 412

H. the broad education necessary to understand the impact of engineering solutions in a global and
societal context
Indicator: CHBE 412 design report rubric question: "Have the social and global impacts of the proposed design been adequately considered in the proposed design?"

I. a recognition of the need for, and an ability to engage in life-long learning
Indicator (ability): The “appropriate use of external references” score on the CHBE 412 reports.
Indicator: CHBE 438 project score

J. a knowledge of contemporary issues
Indicator: CHBE 424 project on dynamical systems and global warming

K. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
Indicator (techniques and skills): CHBE 120 homework scores
Indicator (modern tools): HYSYS assignment score in CHBE 323

b. Summative Outcomes Assessment
Each year a portion of the various outcomes are assessed; this is done according to a schedule to ensure that the Outcomes Cycle is completed every three years. We use direct outcomes assessment on examples of student work:

<table>
<thead>
<tr>
<th>Project/Activity</th>
<th>Outcome(s)</th>
<th>Collected</th>
<th>DAC Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHBE 411 Oral presentation</td>
<td>G</td>
<td>Fall 2007, 2010</td>
<td></td>
</tr>
</tbody>
</table>
The student work is assessed by a subset of the faculty using scoring rubrics that have been prepared for each outcome. The results are reviewed by the faculty. Response thresholds have been developed that invoke a faculty response if scores on any rubric are below the assigned threshold.

Proposals for curriculum, course, or other changes as a result of outcomes assessment are prepared by faculty, and reviewed (with suggestions for revision, if needed) by members of our DAC and students. Faculty review the suggestions and decide how to implement the change.

The faculty assessment of student performance on outcomes is reviewed by the Department Advisory Committee (DAC).

3. Objectives Assessment
   Program objectives are assessed periodically using the following inputs:

   Tools used to assess achievement of our program objectives include:
   - Alumni Surveys
   - Employer Surveys
   - FE Exam Results
   - Departmental Advisory Committee (DAC) input (alumni and employers) Survey data is collected annually, and assessed by faculty once every three years.

   The faculty assessment of student performance on outcomes is reviewed by the Department Advisory Committee (DAC).
Reviews and Updates

Each year a portion of the results of various objectives assessment tools are reviewed; this is done according to a schedule to ensure that the Periodic Review Cycle is completed every three years.

<table>
<thead>
<tr>
<th>Program Objectives</th>
<th>2006-07</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment Court/Outcomes Matrix</td>
<td>2007-08</td>
<td>2010-11</td>
</tr>
<tr>
<td>Response Thresholds</td>
<td>2008-09</td>
<td>2011-12</td>
</tr>
</tbody>
</table>

When updates are required, all constituents (alumni, employers, faculty, students) have an opportunity for input.

Curriculum Review

Curriculum changes are made for a variety of reasons, which may or may not be related to the assessment process. For example, staffing needs may drive curricular changes. Most typically, curriculum changes are proposed by the faculty in response to a perceived need or opportunity to make a curricular improvement.

Curricular improvements may be in response to a concern identified as part of our assessment process. These types of curriculum changes are made after input from our constituencies (faculty, students, alumni and employers) based on assessment results. The following tools are used as part of the overall curriculum review:

- Alumni Surveys (2 and 4 years after graduation)
- Employer Surveys
- Departmental Advisory Committee input (alumni and employers)
- FE Exam Results

Plan for Gathering and Summarizing Data

Because of the small numbers graduating each year, we have found that it is effective to accumulate some data to obtain a more descriptive data set. Because of this we may collect data annually, but only review the accumulated data once every three years. This is indicated in the following table in the Collected and Reviewed columns.
<table>
<thead>
<tr>
<th>Tool</th>
<th>Use(s)</th>
<th>Collected</th>
<th>Reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course data</td>
<td>Used to assess the inputs to a course to see if stated instructional outcomes are consistent with course materials.</td>
<td>Some courses are reviewed every semester according to a predefined schedule.</td>
<td>Each course is reviewed once every three years to a predefined schedule.</td>
</tr>
<tr>
<td></td>
<td>Used to assess whether the program outcomes tied to the course are consistent with the course content.</td>
<td></td>
<td>Note: The review procedure was changed in 2008, and all CHBE courses were reviewed in 2008-09 using the new procedure. We will return to the three-year rotation in the future.</td>
</tr>
<tr>
<td>Alumni Survey</td>
<td>Used to assess program objectives.</td>
<td>Alumni 2 and 4 years after graduation are surveyed every summer.</td>
<td>Collected survey responses are reviewed once every three years.</td>
</tr>
<tr>
<td>Employer Survey</td>
<td>Used to assess program objectives.</td>
<td>Employers of alumni 2 and 4 years after graduation are surveyed every summer.</td>
<td>Collected survey responses are reviewed once every three years.</td>
</tr>
<tr>
<td>DAC Input</td>
<td>Used to assess program objectives.</td>
<td>DAC (alumni and employers) meets annually.</td>
<td>DAC is assigned a subset of all review tasks each year (complete cycle after three years), but their feedback on all aspects of our program is welcome.</td>
</tr>
</tbody>
</table>
Plan for Utilizing Data
The data from each of the assessment tools feeds into one or more of the assessments, as described above.

For the Course Review portion of the Inputs Cycle, the instructor presents his or her course assessment to the entire faculty, which provides immediate feedback.

For changes with larger scope, such as curriculum changes or revision of program objectives, suggestions for change can come from faculty, DAC members, or students. Then proposals for change are typically generated by the faculty, and reviewed (with suggestions for revisions, if needed) by the DAC and student representatives. Proposals for are presented to an open meeting of students for their input. After the faculty has reviewed the DAC and student suggestions, an implementation plan is developed by the department head with the faculty.

Each of the assessments occurs annually, but the targets of assessment change according to a predefined schedule to ensure a complete review is accomplished every three years.

The major annual assessment events include:
- Faculty Retreat, every Fall
- Faculty meetings, approximately weekly throughout the academic year, bi-weekly in summer
- DAC meeting, every Spring – the DAC meets with the faculty and with student representatives
- Student mass meeting (when a proposal is pending for student review) – Spring

<table>
<thead>
<tr>
<th>FE Exam</th>
<th>Used to assess program objectives.</th>
<th>Collected each semester.</th>
<th>Reviewed once every three years.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Examples</td>
<td>Used to assess program objectives.</td>
<td>Specific assignments are collected to demonstrate particular outcomes.</td>
<td>Complete portfolio contents will have been reviewed every three years.</td>
</tr>
</tbody>
</table>
Program Goals and Learning Objectives: Basic Legal Skills

**Goal:** To understand the U.S. legal system, its principal public and private institutions and processes, and lawyers' principal roles and professional responsibilities.

**Objectives:** Students will:
- Show an understanding of what lawyers do, particularly how lawyers interpret and use the texts of U.S. positive law in advising clients and preventing and resolving disputes. (A, S)
- Understand how lessons learned are important in relation to future roles and responsibilities. (A, W, S)
- Know the basics of U.S. legal culture: U.S. Constitution, U.S. legal institutions, and federalism. (A)
- Understand the sources of U.S. positive law and their primary texts. (A, W, S)
- Understand the role that interpretation of the texts of U.S. positive law plays in the development of law by legal officials and in the representation of clients. (A, S)
- Understand the concepts of “binding” authority, persuasive authority, and stare decisis. (A, W, S)
- Understand the concepts of separation of powers and judicial review. (A)
- Know the basic contemporary theories and practice of legislative enactment and interpretation. (A, W, S)
- Understand the development of common law and common law rules. (A, W)

**Goal:** To read, interpret, evaluate, synthesize, and memorialize law-related texts, ideas, and facts at a level of analytic and rhetorical competence necessary for successful study of law as a distinct academic and professional discipline.
Objectives: Students will:
- Brief a case opinion, accurately identifying the issue on appeal, holding, judgment, procedural history, material facts, rules of law, reasoning, and policy choices. (A)
- Recognize in case opinions different forms of reasoning, including analogical, deductive, inductive, dialectical, and synthetic. (A)
- Evaluate a case opinion from multiple perspectives, e.g., use of precedent, reasoning, and rhetoric; reliance on historic, economic, or political sources and cultural or social values; and attention to prospective impact. (A, S)
- Construct a synthesis of multiple case holdings. (A, S)

Goal: To recognize, evaluate, and employ appropriate professional legal conventions regarding deductive, inductive, analogical, and synthetic reasoning.

Objectives: Students will:
- Recognize each type of reasoning in case opinions. (S)
- Recognize deductive and analogical reasoning in a student's conclusion of law. (A)
- Recognize each type of reasoning in a student's conclusion of law. (S)
- Evaluate the soundness of each type of reasoning in a particular text, whether professional or student. (S)

Goal: To predict the probable judicial resolution of simulated legal dispute scenarios.

Objectives: Students will:
- Recognize legal issues in simulated scenarios. (A, W, S)
- Identify and categorize material facts in scenarios. (A, W, S)
- Identify and synthesize relevant rules of law from one or more primary legal authorities. (A, W, S)
- Identify and evaluate analogies and distinctions between facts in the sources of the rules and in scenario facts. (A, W, S)
- Deduce, articulate, and explain a conclusion of law based upon the application of a rule of law to scenario
facts. (A, W, S)

- Identify and evaluate reasons for choosing among competing analyses of the rules of law or applications of rules to facts. (A, W, S)

**Goal:** To provide a peer and a supervisor [with] a written explanation of the student’s prediction of the probable judicial resolution of a simulated legal dispute (i.e., draft a conclusion of law) in a form that conforms to basic professional conventions regarding organization and style.

**Objectives:** Students will:

- Write clear and concise paragraphs supporting and evaluating the components of a conclusion of law. (A, W, S)
- Identify and employ effective organizational techniques. (A, W, S)
- Use standard, formal English, including correct grammar, syntax, punctuation, and mechanics. (A, W, S)
- Show an understanding of appropriate diction and style. (W, S)
- Understand when and how to support an assertion. (A, W, S)
- Be able to use standard legal citation format. (W, S)

**Goal:** To conduct basic legal research at a level of competence sufficient to perform typical assignments in first-year summer legal employment.

**Objectives:** Students will be able to

- Find and retrieve legal texts in electronic and print formats at a level of competence sufficient to support first-year coursework. (A)
- Use basic Westlaw and LexisNexis finding services. (A)
- Understand basic legal bibliography and print finding tools. (W)
- Develop more advanced and efficient skills on Westlaw and LexisNexis. (W, S)
- Understand basic Internet legal research techniques and identify and evaluate databases for legal
information. (W, S)

- Construct a research plan that identifies issues and relevant types of legal authorities for simulated client scenarios. (W, S)
- Conduct research in a time- and cost-effective manner, including attention to time management, effective note-taking, and selection of most efficient print and electronic tools. (W, S)
- Memorialize research findings regarding a simulated scenario in a concise written summary for a peer and a supervisor that:
  - Orders all legal authorities pertinent to the scenario in a hierarchy determined by relevance to the scenario. (W)
  - Describes each legal authority in sufficient detail to make its relevance apparent. (W)
  - Includes accurate and complete citations. (W)
  - Would be sufficient to support drafting of a law office memorandum. (W)

**Goal:** To master professional legal writing conventions regarding format, organization, usage, and citation.

**Objectives:** Students will:

- Understand the basic format, organization, and style conventions of common law practice documents, including law office memoranda, client letters, selected advocacy writings, such as motions, and memoranda in support of a motion, and/or appellate briefs. (S)
- Be able to write a law office memorandum and a memorandum in support of (or opposition to) a motion, or an appellate brief, in simple simulated scenarios that meet professional standards of competence of analysis, format, organization, usage, and citation. (S)
- Be able to provide constructive editorial advice for a peer’s law office memorandum and a memorandum for a motion or an appellate brief. (S)

**Goal:** In simulated law practice scenarios, to identify legal issues, investigate relevant facts and legal rules, communicate
appropriate professional recommendations to various
simulated supervisors and clients, and represent or advocate
simulated clients’ interests to simulated decision-makers or
other interested parties.

Objectives: Students will:
• Be able to listen to, clarify, understand, and complete a
  simulated law office assignment given by a simulated
  supervisor. (W, S)
• Be able to plan, describe, and evaluate the relative
  merits of alternative courses of action to resolve simple
  client problems or achieve simple client goals. (W, S)
• Speak, listen, and write effectively and appropriately for
  a simulated client and supervisor. (W, S)
• Understand and meet a lawyer’s professional
  responsibilities in coursework and as relevant to various
  simulated scenarios. (W, S)

Goal: To recognize excellent writing in and about law and to learn
techniques for improving one’s own writing.

Objectives: Students will:
• Analyze and effectively critique legal writing. (A, W, S)
• Reflect on and write about their own writing process.
  (A, W, S)
• Develop a basic ability to identify and employ an
  appropriate format, organization, level of detail, style,
  and tone for conveying a legal analysis, advice, or
  advocacy to various simulated lay or professional
  audiences. (S)
• Begin to develop a personal “voice” for writing about
  legal matters. (W, S)
• Distinguish between effective and ineffective legal
  writing in various contexts. (W, S)

Goal: To recognize the professional importance of time- and cost-
effective work habits.

Objectives: Students will:
• Effectively track time spent on various tasks involved in
  an assignment. (A, W, S)
• Learn to use effective briefing, note-taking, and drafting techniques. (A,W, S)
• Learn to manage time to support collaborative activities. (A, W, S)
• Understand the relation between effective work habits and meeting professional responsibilities. (A, W, S)

Goal: To learn techniques for self-assessment, peer review, and collaboration to support ongoing acquisition of information and skills necessary for successful academic study and professional practice.

Objectives: Students will:
• Analyze and effectively critique the writing of peers. (W, S)
• Reflect regularly on their own learning process. (A, W, S)
• Be able to collaborate with peers in a group problem-solving process. (A, W, S)
• Understand the relation between ongoing acquisition of information and skills and meeting professional responsibilities. (S)
For Friday, October 10, read *Ed. Nowogroski Insurance, Inc., v. Rucker*.

Reading cases and extracting the important information can be difficult at first. Critical reading generally requires more than one reading of a case. In order to help you process the *Nowogroski* case, we would like for you to first read the case fairly quickly and reflect on it as you are reading it. Please type your reflections and hand them in to your Teaching Fellow on Friday, October 10.

Think of this reflective writing as a more formal form of margin notes (more formal in that you’ll type your reflections and submit them).

Here’s what we want you to hand in:
1. A list of any words that you either had to look up in the dictionary or weren’t absolutely sure of their meaning.
2. A description of any strategies you used to understand the sequence of the events or the relationship of the parties involved. For example, did you make a drawing? Did you reread? Did you take notes?
3. Any points that you find particularly difficult to understand.

You should submit reflections that respond to each item in the list above. For example, if you didn’t find any points difficult to understand, why do you think that was?

After you have typed your initial reflections, you should read the case again—this time more slowly, making notes in any way you find helpful.

*We’ll be using Nowogroski for an in-class workshop on Friday, October 10.*
X. APPENDIX D

Basic Legal Skills
End-of-Year Self-Assessment
May 2005

Directions

This is the capstone assignment for all three quarters of Basic Legal Skills. As you know, BLS is a “mastery” course, and the End-of-Year Self-Assessment is your opportunity to reflect on and describe the knowledge and skills you have actually acquired through your work in the course. The aim of this final exercise is to encourage self-awareness about what each of you, at this point in your career, can and cannot reliably accomplish in legal analysis, research, and writing.

The assignments you have submitted to Portfolio during the year embodied your knowledge, skill, and effort at the time you completed them. While each major writing assignment involved a common core of legal analysis, organization, and writing tasks, it also required you to employ new information, resolve very different types of legal issues, and address different audiences. At the time, those additional challenges probably seemed wholly new, and many of you may have felt quite daunted and far from “masterful.” At the time, many of you may have thought that the objective was to figure out the “answer” and write the memo or brief in the “right” way. From the BLS faculty’s viewpoint, the goal was for you to build a set of transferable analytic, research, and communication skills.

We hope you will now take the time to review the major BLS assignments from fall to the present, and we hope that you will see, in retrospect, which course objectives were addressed in each assignment. Moreover, as you consider each assignment, we hope that you will feel you could now accomplish a comparable task more confidently and effectively.

An excellent self-assessment will reflect a detailed and realistic self-assessment of your present degree of mastery of course objectives. An excellent self-assessment does not necessarily mean you have
mastered all course objectives but that you can accurately describe those you have mastered and those you still need to work on.

Your prose answers to the questions we ask, including the descriptions of any revisions you have made, are the most important part of your End-of-Year Self-Assessment. A very persuasive way to demonstrate mastery may be to submit a revised version (in whole or in part) of one or more earlier assignments, together with a specific explanation of what knowledge or skills the revision demonstrates.

**It is essential that you also submit with any revision a specific explanation of what you learned during the process of revision. Submitting a revised document without describing what you have learned to do differently will not have any effect on our evaluation.**

**Grading**

We will not evaluate you on the basis of how you self-assess in response to the questions in Part I. Those are used for longitudinal comparisons of the competency students report from year to year as we develop the BLS program. However, we will evaluate your self-assessments in response to the questions in Part II (and Part III, if you submit any revised work).

The End-of-Year Self-Assessment will account for **fifteen percent** of your final BLS grade.

A superb, credible, specific, and well-documented self-assessment will earn the full fifteen points. A superb self-assessment would include references to one or more revisions of earlier work with specific descriptions of how the student has improved the document and what she or he learned from doing so.

A very good self-assessment will earn twelve points. It will be somewhat less specific or lacking in credible evidence of mastery of a particular skill than a superb self-assessment. For example, a revised memo that simply incorporated a teacher’s editorial suggestions without more would not be credible evidence of mastery.
A good self-assessment will earn ten points. It will reflect a good understanding of course objectives and a credible self-assessment, but it may lack specific detail or any evidence of substantial improvement. At a minimum, a good self-assessment accurately describes the student’s current competencies. It differs from a very good assessment by omitting any specific self-awareness of how the student acquired those competencies or how he or she could improve them.

A self-assessment that is vague or generalized and lacks definite references to specific skills and particular documents that have been revised effectively will receive no more than seven points.

As a practical matter, students who are dissatisfied with their accomplishments and/or our evaluations have an opportunity to improve their course grade through this final exercise.
Basic Legal Skills
End-of-Year Self-Assessment
May 2005

Name_______________________________   Section ______________

Note
Please type your responses into this document, create an artifact out of it, and send it back to us in Portfolio with other artifacts you choose to submit.

Directions
For this final assignment, please submit the following:

a) Documents chosen from your artifacts in Portfolio (documents you name in the table below). You may submit artifacts from any quarter this year. Even though you submitted your brief earlier this month, you will need to resubmit it along with the other artifacts you choose to use as evidence of your competence in BLS.

b) This completed self-assessment saved as a Word document.

Deadline for submission to Portfolio: 9:00 a.m. on Monday, May 23, 2005

Part I of Self-Assessment (not graded)

This part of the self-assessment provides useful information for program development and will not be graded. Part II and Part III will be graded.

1. In the tables below, put an “X” in the column that best describes your competence in each objective, then type in the name of the artifact that BEST shows that competence. You will attach these artifacts when you submit your portfolio. You can include artifacts from autumn, winter, or spring quarter, but be selective.

1 = minimal understanding, knowledge, or competence
2 = reasonable understanding, knowledge, or competence for a beginner
3 = very good understanding, knowledge, or competence for a
beginner

| Course Objective                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---|---|---|---|---|
| Understanding of what lawyers do, particularly how lawyers interpret and use the texts of U.S. positive law in advising clients                                                                                                                                                                                                                                                                                                                                 | 1 | 2 | 3 | Artifact |
| Understanding of how lessons learned are important in relation to future roles and responsibilities                                                                                                                                                                                                                                                                                                                                 |  |  |  | Artifact |
| Understanding the sources of U.S. positive law and their primary texts                                                                                                                                                                                                                                                                                                                                 |  |  |  | Artifact |
| Understanding of the role that interpretation of the texts of U.S. positive law plays in the development of law by legal officials and in the representation of clients                                                                                                                                                                                                                                                                                     |  |  |  | Artifact |
| Ability to construct a synthesis of multiple case holdings                                                                                                                                                                                                                                                                                                                                                         |  |  |  | Artifact |
| Ability to recognize legal issues in simulated scenarios                                                                                                                                                                                                                                                                                                                                                          |  |  |  | Artifact |
| Ability to identify and categorize material facts in scenarios                                                                                                                                                                                                                                                                                     |  |  |  | Artifact |
| Ability to identify and synthesize relevant rules of law from one or more primary legal authorities                                                                                                                                                                                                                                           |  |  |  | Artifact |
| Ability to identify and evaluate analogies and distinctions between facts in the sources of the rules and in scenario facts                                                                                                                                                                                                                               |  |  |  | Artifact |
| Ability to deduce, articulate, and explain a conclusion of law based upon the application of a rule of law to scenario facts                                                                                                                                                                                                                       |  |  |  | Artifact |
| Ability to identify and evaluate reasons for choosing among competing analyses of the rules of law or applications of rules to facts                                                                                                                                                                                                                 |  |  |  | Artifact |
| Ability to evaluate the soundness of |  |  |  | Artifact |
| Ability to reason in a particular text, whether professional or student |
| Ability to write clear and concise paragraphs supporting and evaluating the components of a conclusion of law |
| Ability to identify and employ effective organizational techniques |
| Ability to use standard formal English, including correct grammar, syntax, punctuation, and mechanics |
| Understanding of appropriate diction and style |
| Understanding of when and how to support an assertion |
| Ability to use standard legal citation format |
| Ability to write an appellate brief that meets professional standards in analysis, format, organization, citation, style, and tone |
| Ability to write in my own “voice” about legal matters |
| Ability to analyze and critique legal writing effectively |
2. Indicate how effective you think these activities are for you when you are learning to solve complex problems. A “0” represents “not effective” and a “4” represents “very effective.” Put an “X” in the box for the number that best represents your answer for each item.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not Effective</th>
<th>1</th>
<th>2</th>
<th>Very Effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture by the professor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homework reading and exercises</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short, informal writing assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longer, more formal writing assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examples of how someone else has solved a similar problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group activities in class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study groups outside of class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning a process or heuristic that can be used to solve a type of problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching the teacher model how to solve a similar problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting one-on-one with an instructor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Indicate how important you think the following skills are to being an effective practicing lawyer. A “0” represents “not important” and a “4” represents “very important.” Put an “X” in the box for the number that best represents your answer for each item.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Not Important</th>
<th>Very Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online (electronic) research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research note taking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaboration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral presentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persuasion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reasoning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part II of Self-Assessment (graded)

Write short answers to the questions below.

1. Rate your competence in the following areas and talk briefly about each objective, thinking about the specific questions provided.

   - My ability to manage my own writing process is:

     | Minimal | Reasonable | Very good |
     |---------|------------|-----------|

   How has your writing process changed this year—or has it? Are you aware of writing differently or thinking about your writing in a different way?

   Your answer:

   - My ability to recognize and develop personal strategies for learning the skills and information required is:

     | Minimal | Reasonable | Very good |
     |---------|------------|-----------|

   What do you know about strategies that work or do not work for you in regard to completing the analytical, research, and writing tasks that are required in writing an effective memo or brief? (Please be specific.)

   Your answer:
2012] LESSONS FOR LEGAL EDUCATION 1073

- My ability to analyze and effectively critique the legal writing of peers is:

| Minimal | Reasonable | Very good |

How much do you think you have contributed to the writing process of others both in class and outside of class? Are you more confident in your ability to contribute to the writing of others? Have you worked with other students outside class on writing projects? What have you learned, if anything, about your effectiveness in evaluating and commenting on others' writing?

Your answer:

- My ability to collaborate with peers in a group problem-solving process is:

| Minimal | Reasonable | Very good |

Has your ability to collaborate changed in any way this year?

Your answer:

2. How confident are you that you could be a productive colleague in a law office environment this summer?

| Not at all confident | Somewhat confident | Very confident |
Where would you have trouble? What would be easy for you? How would you go about getting through the hard parts if you were on your own?

Your answer:

Part III of Self-Assessment (graded)

Use the space below to list assignments you revised in full or in part this year and to analyze, in detail, your revisions and revision process. You should choose any revised assignments that will help demonstrate your mastery of important skills or knowledge. We encourage you to discuss revisions you made to your appellate brief after you submitted your first draft or after you participated in the argument conference with a BLS faculty member and other first-year students.

Your revision analyses should consist of three main chunks of content:

a) Goals for the revision,
b) Some specific examples (from the assignment) of how you accomplished these goals, and
c) An overall evaluation of the success of your revision.

You could structure this content in several different ways, and you should choose the structure that suits you best. Your revision analysis should be no longer than one single-spaced page per revised assignment.

Please make sure to submit any revised versions of assignments as artifacts when you submit this final self-assessment to Portfolio.

Don’t forget to include your name on this self-assessment and your artifacts!
XI. APPENDIX E\textsuperscript{81}

**Selections from a Student's End-of-Year Self-Assessment**
May 2005

<table>
<thead>
<tr>
<th>Course Objective</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Artifact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding of what lawyers do, particularly how lawyers interpret and use the texts of U.S. positive law in advising clients</td>
<td></td>
<td></td>
<td>X</td>
<td>Sanchez Memo</td>
</tr>
<tr>
<td>Understanding of how lessons learned are important in relation to future roles and responsibilities</td>
<td></td>
<td></td>
<td>X</td>
<td>Washington Brief</td>
</tr>
<tr>
<td>Understanding the sources of U.S. positive law and their primary texts</td>
<td></td>
<td></td>
<td>X</td>
<td>Elwha Memo</td>
</tr>
<tr>
<td>Understanding of the role that interpretation of the texts of U.S. positive law plays in the development of law by legal officials and in the representation of clients</td>
<td></td>
<td></td>
<td>X</td>
<td>Washington Brief</td>
</tr>
<tr>
<td>Ability to construct a synthesis of multiple case holdings</td>
<td></td>
<td></td>
<td>X</td>
<td>Sanchez Memo</td>
</tr>
<tr>
<td>Ability to recognize legal issues in simulated scenarios</td>
<td></td>
<td></td>
<td>X</td>
<td>Sanchez Memo</td>
</tr>
<tr>
<td>Ability to identify and categorize material facts in scenarios</td>
<td></td>
<td></td>
<td>X</td>
<td>Washington Brief</td>
</tr>
<tr>
<td>Ability to identify and synthesize relevant rules of law from one or more primary legal authorities</td>
<td></td>
<td></td>
<td>X</td>
<td>Sanchez Memo</td>
</tr>
<tr>
<td>Ability to identify and evaluate analogies and distinctions between facts in the sources of the rules and in scenario facts</td>
<td></td>
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<td>X</td>
<td>Washington Brief</td>
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\textsuperscript{81} Our course materials notified students that their work might be used on a no-name basis in teaching, assessment, and scholarship. At the time we drafted the article, see *supra* note 77, Kate O’Neill also asked for and received individual permission from the student whose self-assessment is quoted.
| Ability to deduce, articulate, and explain a conclusion of law based upon the application of a rule of law to scenario facts | X | Washington Brief |
| Ability to identify and evaluate reasons for choosing among competing analyses of the rules of law or applications of rules to facts | X | Sanchez Memo |
| Ability to evaluate the soundness of legal reasoning in a particular text, whether professional or student | X | Stare Decisis Essay |
| Ability to write clear and concise paragraphs supporting and evaluating the components of a conclusion of law | X | Sanchez Memo |
| Ability to identify and employ effective organizational techniques | X | Washington Brief |
| Ability to use standard formal English, including correct grammar, syntax, punctuation, and mechanics | X | Sanchez Memo |
| Understanding of appropriate diction and style | X | Washington Brief |
| Understanding of when and how to support an assertion | X | Washington Brief |
| Ability to use standard legal citation format | X | Washington Brief |
| Ability to write an appellate brief that meets professional standards in analysis, format, organization, citation, style, and tone | X | Washington Brief |
| Ability to write in my own “voice” about legal matters | X | Sanchez Memo |
| Ability to analyze and critique legal writing effectively | X | Stare Decisis Essay |

2. Indicate how effective you think these activities are for you when you are learning to solve complex problems. A “0” represents “not effective,” and a “4” represents “very effective.” Put an “X” in the box for the number that best represents your answer for each item.
3. Indicate how important you think the following skills are to being an effective practicing lawyer. A “0” represents “not important,” and a “4” represents “very important.” Put an “X” in the box for the number that best represents your answer for each item.

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<tr>
<th>Skill</th>
<th>Not Important</th>
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<tr>
<td>Library research</td>
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<td>Online (electronic) research</td>
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<td>Writing</td>
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<td>Persuasion</td>
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<td>Reasoning</td>
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<td>Time management</td>
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Part II of Self-Assessment (graded)

Write short answers to the questions below.

1. Rate your competence in the following areas and talk briefly about each objective, thinking about the specific questions provided.

   - My ability to manage my own writing process is:

     | Minimal | Reasonable | Very good |
     |---------|------------|-----------|
     |         |            | X         |

   How has your writing process changed this year—or has it? Are you aware of writing differently or thinking about your writing in a different way?

   Your answer:

   My writing process is completely different than it was at the beginning of the year. Each major problem that we worked on in BLS helped me refine my writing process so that I was replacing bad writing habits with new techniques. Specifically, I have made the following improvements: (1) my perfectionism has abated to the point where I use a “rough draft” as a work in progress (rather than torturing myself by trying to produce a perfect first draft), (2) I spend at least a few days carefully thinking through each major issue so I am not spinning my wheels while researching (3) I finish my research before starting my writing, and (4) I take advantage of group collaboration.

   First, my greatest liability as a writer has always been my perfectionism. As long as I can remember, I have not written “first drafts”—rather, as I worked on a writing project, I would agonize over every word in every sentence until it was perfect. Even though this method produced good work, it was a horribly torturous writing process that aggravated my writer’s block. I was still using this “first draft is the final draft” process when I worked on the Sanchez Memo this year (as evidenced by the remarkable similarity
between the first and final drafts of the Sanchez Memo in my portfolio). While the Sanchez Memo was arguably my finest BLS moment (because it was the moment when I broke through the proverbial brick wall and learned how to synthesize legal rules), it was an incredibly agonizing writing process. Fortunately, I finally was able to let go of my initial perfectionism by the Washington Brief process, as evidenced by the drastic difference in structure, prose, and quality between my first and final drafts. I am not entirely sure what finally made me let go of my urge to be perfect on the first try. My hunch is that it was the sheer magnitude of work that I dealt with as a first year law student. This year I have learned that law students cannot do everything perfectly; rather, we have to be strategic and pick our battles wisely. This revelation caused me to hold back on my efforts to produce a perfect first draft—because strategically, it was a better use of time and energy to do so after receiving initial feedback from faculty and fellow students. This change in my writing process—using a first draft as a first draft (wow, pretty novel idea!)—is one of the things I am most proud of from my first year.

The second major change in my writing process is that I spend at least a few days carefully thinking through each major issue before researching (or writing). At the beginning of the year, I thought as I wrote. As a result, my writing was all over the map, and my writing process was slow and arduous. For example, it took me about three hours to draft each page of my Sanchez Memo (because I was figuring things out as I typed). In contrast, after I segregated my writing process into separate stages (initial preparation, research, first draft writing, editing, final draft writing), the actual writing went much faster. For example, it took me approximately 40 minutes to draft each page of my Washington Brief because all of the initial work had been completed, and I was not going onto Westlaw every five minutes to find case law for each point.

The third major change in my writing process is that I completely finish my researching before starting my writing. Before making this change in my writing process, working on the Elwha Memo was particularly tortuous for me because I never finished researching—I was always looking
for the “magical cases” that I thought were eluding me (I had not found a case completely on point, and I mistakenly thought this was a result of faulty researching on my part). The Elwha process showed me that if I don’t find an on-point case after carefully jumping through the research hoops, there probably isn’t one out there. As a result, it was much easier to draft the Washington Brief because I segregated the research and writing phases of the process—I completely fleshed out my research before writing the first word of my memo, and I was confident that I had found all there was to find.

Finally, I take advantage of group collaboration. Before this year, I always bristled at the concept of group collaboration on research and writing. My concerns were that it would take up valuable time that I could use to look over my own writing. I also have been very possessive over my writing style and worried that the editing of others would dilute my writing voice. Collaborating with other students this year—at all stages of the writing process—drastically changed my attitude towards group collaboration. I learned that different researching and writing styles do not have to be in conflict; rather, there is a synergy that results from a collaborative effort. By the Washington Brief process, I was doing most of my research and initial writing in the presence of other students so I could bounce ideas off of them. I found this approach to be much more efficient and effective.

I am very proud of the improvements I have made this year in my writing process. For the first time, I actually feel like I go through a “process” rather than an agonizing one-shot burst of writing.

- My ability to recognize and develop personal strategies for learning the skills and information required is:

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What do you know about strategies that work or do not work for you in regard to completing the analytical,
research, and writing tasks that are required in writing an effective memo or brief? (Please be specific.)

Your answer:

During my first year of law school, I developed several specific strategies that work for me when completing the analytical, research, and writing tasks required in writing an effective memo or brief. These strategies include: (1) producing an issues outline (before doing anything else) that carefully lays out specific legal questions for research, (2) identifying someone to collaborate with at the research stage who brings different but comparable skills to the project, and (3) producing the structure of the argument first during the writing stage before plunging into the actual writing itself.

First, I learned the hard way that it is absolutely essential to produce an issues outline before tackling the research or writing phases. During the Elwha Memo process, I received the assignment on a Friday afternoon and was so excited to get started that I got onto Westlaw and started researching. For the next day, I spun my wheels hopelessly, coming up with nothing useful. The next day, I went back to the drawing board and spent a few hours meticulously outlining the legal issues from the hypothetical fact pattern. After doing this, my research was focused and efficient. During the Washington Brief process, I first took a day to produce a specific issues outline, then approached the research process. This method works extremely well for me because, by focusing my research, I am able to know whether my research finds apply to the fact pattern.

The second strategy that works well for me during the research phase is to identify a fellow student who brings different but comparable skills to the process and research with that student. During the beginning of the Elwha Memo process, I researched alone, which caused two problems. First, I was not as efficient in finding results from sources that I was not well-versed with. Second, I did not know when to stop researching and had nobody to bounce my ideas off of. At the start of the Washington Brief
process, I found a student from my section who was researching the same issue (severance and bifurcation) and who complemented my research skills and weaknesses (I’m particularly strong at library-based research; he is strong at web-based research). The research process went extremely well, since we each unearthed primary and secondary legal sources that we would not have found had we been researching separately.

Third, rather than writing to write, I now spend considerable time developing the structure of my argument (then filling in each section with prose). During the Sanchez and Elwha Memos, I just started writing, without thinking through the structure of the argument. This led to all sorts of problems that I had to deal with later in the writing stage, when I was trying to make the memo make sense as a whole. The point headings exercise that we did on the Washington Brief helped me understand that it is important to start with the structure of your argument at the beginning of the writing phase—then fill in each point header with prose. This was a valuable lesson to learn, since it makes the writing process much smoother and efficient.

- My ability to analyze and effectively critique the legal writing of peers is:

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How much do you think you have contributed to the writing process of others both in class and outside of class? Are you more confident in your ability to contribute to the writing of others? Have you worked with other students outside class on writing projects? What have you learned, if anything, about your effectiveness in evaluating and commenting on others’ writing?

Your answer:

These last two quarters I have worked quite a bit with a small group of three other BLS students from my section.
We formed a peer-editing group because we all contribute very different (and complimentary) skills. This collaboration has produced a number of benefits. First, our draft revisions have substantially improved in a number of areas. Second, the skills that we each brought to the group initially are “rubbing off” on one another. Third, we each have refined our peer editing skills.

During the Sanchez Memo, Elwha Memo, and Washington Brief projects, our group of four BLS students met twice a week during lunch to talk about common problems that we were experiencing in our drafting. During the latter stages of the writing process, we traded drafts and edits twice a week. As a result, each of these papers was reviewed by three different students at least five or six times total. This level of organized peer review was extremely valuable to my writing process.

First, my drafts substantially improved in a number of areas as a result of this peer review. I did not seek out peer editing beyond the in-class workshop during the Crunchy Cremes process, and as a result I felt that my final submission was not my best work. The structure of my argument was disjointed—paragraphs did not communicate the synthesis of legal rules and the application of these rules to the fact pattern in a way that mirrored an IRAC formula. Many of the concepts I was trying to explain were not sufficiently clear to a reader. After assembling a group of peers for editing during the Sanchez Memo, my writing improved remarkably. First, my structure tightened up—after constructive criticism, I developed an effective IRAC pattern for synthesizing the rule up front, then applying the rule (mentioning the potential arguments of both sides), then noting policy implications that the court possibly would find persuasive. Second, I learned to use precise language. One of the members of our group was merciless with a red pen—if a word was not absolutely essential, it was crossed out; if a word was ambiguous, it was circled. Third, peer editing helped me develop an effective tone for legal writing. My friends were honest when they thought my tone was too argumentative, too informal, or too bland. There is no way that I would have improved as much as I have this year as a legal writer without this constant feedback from
others.

Second, the skills that each of us brought to our peer-editing group started “rubbing off” on one another. We did not just benefit from the individual edits on each draft—we also learned techniques from each other. For example, I can now go through my own paper and cut out superfluous wording. (In my Elwha memo, for example, I was 500 words over the word count in my rough draft, and I fixed this by deleting unnecessary words—I did not eliminate a single argument in my memo.) From others in my group I learned essential techniques on tone, transitions, topic sentences, and crafting rule synthesis paragraphs. While I learned a lot by researching and writing the BLS memos and briefs, I learned ten times more by constantly going through an editing process with peers.

Third, by participating in a rigorous and ongoing peer-editing process, I have developed my own skills as an editor of legal writing. At the beginning of the year I focused on “surface level concerns” like grammar and punctuation. After reading and critically thinking about more than thirty drafts of peer memos and briefs, I now have an ability to focus on argumentative structure, tone, and persuasiveness of the underlying legal rationale. My ability to give comments that substantially contribute to the development of a legal argument is light years ahead of where I was at the beginning of the year (when I was admittedly serving as a gussied-up spell-checker). I feel very confident that my exposure to the writing of my peers has given me the skills to collaborate meaningfully with others in a legal writing process.

- My ability to collaborate with peers in a group problem-solving process is:

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<td>Very good</td>
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Has your ability to collaborate changed in any way this year?

Your answer:
My favorite part of BLS has been the collaboration with peers in a group problem-solving process during the research phase of both the Elwha Memo and Washington Brief. My ability to collaborate has changed quite a bit this year, particularly in three areas. First, I am now able to think through a group project in advance and divide tasks according to the skills of my colleagues. Second, for the first time in my life I am able to delegate tasks to my peers and trust that they will get the job done. Third, I have learned how to communicate effectively with others during a research process.

First (and perhaps most importantly), I have learned to invest a substantial amount of time and energy thinking through a group problem-solving process before jumping into the actual research and work. Throughout my academic and professional experiences, I have always had a “shoot first, ask questions later” mentality—when receiving a problem or task, I would burst out of the gate and work on a variety of tasks before thinking through the process itself and talking with others about it. While this style was not necessarily a problem in previous situations, I noticed immediately that it was not going to work in law school. During the Crunchy Cremes and Sanchez problems, I found that I was doing a lot of unnecessary work rather than relying on the thoughts and “finds” of my peers that were being posted on E-Post. When it was time to research on the Washington Brief, I assembled a group of three other BLS students, and we sat down twice and planned our approach before visiting the reference shelves in the library. As a result, we were infinitely more effective in our ability to find legal sources quickly that addressed the key issues in the problem.

Second, I have learned how to delegate tasks to others and, more importantly, how to trust others after delegating. I am very aware of a lifelong tendency—my strong instinct to “go it alone” and do things myself. Perhaps this was a result of some bad experiences in my undergrad education, working on group projects with other students that did not bring the same level of commitment and attention to detail. Regardless, collaborating on group problems in law school
has been refreshing because students are not putting up with the abuse of their 1L year “just for fun”–almost everyone is strongly invested in the process and wants to excel. Midway through the year I started delegating more of my research tasks to others in my small group of friends. We each bit off a specific compartmentalized chunk of the Washington Brief problem and trusted that we would each find the applicable law. Obviously this was successful–during the brief-writing and appellate-argument stages, I was relying heavily on quality arguments that had been fleshed out by my peers. This trust was so strong that I actually called one of the students from our group two hours before my semi-finals round in the 1L appellate advocacy competition because I wanted his insight on American conspiracy law.

Third, I have learned how to communicate effectively with others during a group collaborative research process. Like most other people, I abhor long meetings without a purpose. After a few of those meetings, our small group started finding ways to stay on task in our communications, only bringing up essential points of discussion. I have also learned how to communicate with my peers one-on-one during the research collaboration process. For example, during the Washington Brief research process, I tag-teamed with one of my peers on the severance and bifurcation issue, and there were several days when we would research separately during the morning before classes, then meet up for lunch to touch bases and refine our research issues.

I really did not have good group collaboration skills before coming to law school. The problems in BLS—particularly the research element of the Elwha Memo and Washington Brief—have helped me refine these collaboration skills.

2. How confident are you that you could be a productive colleague in a law office environment this summer?

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<tr>
<th></th>
<th>Not at all confident</th>
<th>Somewhat confident</th>
<th>Very confident</th>
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Where would you have trouble? What would be easy for you? How would you go about getting through the hard parts if you were on your own?

Your answer:

I am extremely confident in my legal research and writing skills as well as my ability to produce a competent predictive memo or appellate brief on a legal issue for a law-trained supervisor in a law office environment this summer.

The most challenging part for me in a law firm over the summer would be quickly establishing a collaborative environment with my peers in which I had a high level of trust. I was fortunate during my first year of law school because I had time to develop relationships with my peers and figure out which friends had skills that were different yet compatible with my own. I think it would be difficult to make this same assessment of my peers in a summer office setting, mostly because I would not have as much time to assess their skills and liabilities in a collaborative environment.

I feel confident, however, that I have developed skills that will help me overcome this obstacle. First, learning from my peers this year during collaboration on research and writing has given me a diverse set of skills as well as the ability to adapt to a variety of different work styles. I feel much more versatile and flexible in terms of working with others, and I have no doubt that I could make adjustments as the summer went on (as I learned more about the skills of my colleagues). Second, I have developed an ability to give myself constructive criticism as well as contextualize the constructive criticism of others. I have no doubt that I would be able to adjust to unforeseen situations and different styles on a variety of collaborative projects.

I believe research of print and online resources would be relatively easy for me after what I have learned in BLS during the winter and spring quarters. The approach BLS used was very effective in teaching us research skills. The initial lectures from reference librarians were extremely informative and put us in direct contact with individuals who can help us develop effective research strategies. The
weekly research exercises emphasized appropriate print and online resources that are available while challenging me to “learn the system.” As a result, I am now able to find answers to legal questions fairly quickly, using a wide array of legal resources. I feel that I would be able to immerse myself in a law firm or other legal office environment and quickly adapt my own skills while “learning the ropes.”

As a result, I am very confident that I will be able to research and write effective memos and briefs for a law-trained supervisor in a law firm or other legal office this summer.
Part III of Self-Assessment (graded)

Use the space below to list assignments you revised in full or in part this year and to analyze, in detail, your revisions and revision process. You should choose any revised assignments that will help demonstrate your mastery of important skills or knowledge. We encourage you to discuss revisions you made to your appellate brief after you submitted your first draft or after you participated in the argument conference with a BLS faculty member and other first-year students.

Your revision analyses should consist of three main chunks of content:

a) Goals for the revision,

b) Some specific examples (from the assignment) of how you accomplished these goals, and

c) An overall evaluation of the success of your revision.

You could structure this content in several different ways, and you should choose the structure that suits you best. Your revision analysis should be no longer than one single-spaced page per revised assignment.

Please make sure to submit any revised versions of assignments as artifacts when you submit this final self-assessment to Portfolio.

[____________’s] REVISION ANALYSIS:

There were two revisions that I wish to highlight this year to demonstrate my continued development of relevant skills and knowledge. First, I revised several sections of my Elwha memo after receiving faculty feedback. Second, I did a massive re-work of my initial draft of the Washington Brief (after submitting the rough draft to Portfolio).

ELWHA MEMO

There were several specific goals that I wanted to accomplish while revising my Elwha memo after receiving BLS faculty feedback and a grade on the project. While my final draft was strong and I was satisfied with the grade I received, I wanted to (1) fix various problems with Bluebook
citation, (2) revise the “Facts” section of the memo to include a few pertinent facts from the hypothetical that did not make it into the final draft I submitted, (3) appropriately cite the material operative provisions of IGRA in full so the reader has the context for my analysis, (4) more effectively emphasize the fact that under IGRA and ASRA the state is not liable (liability is limited to Western), and (5) make it clear to the reader that civil penalties under ASRA go to the state, not the tribe.

Revising the draft to accomplish these goals, there were several specific revisions used. First, I incorporated two additional key sentences into the “Facts” section that were omitted in the graded final draft submitted to Portfolio. In the second paragraph, I mentioned that archaeologist Olds told Western that it would have to stop work at the site if the materials and remains were very old or likely Native American. I also inserted a sentence stating that skeletons and artifacts found in close proximity usually indicate an Indian burial ground. These two sentences are key in giving the reader adequate context to see that there is a strong case that Western “knowingly” removed the remains and that there was a high probability that the bones found were indeed Elwha remains.

Second, I went through the Bluebook and found several “rookie mistakes” that I made when working on citation. Specifically, I did not pay attention to the “Case Names” abbreviations chart in the back of the Bluebook, and so I went through and changed several words. (For example, “International” was changed to “Int’l,” and “Industries” was changed to “Indus.”)

Third, I inserted a full citation of the operative section of IGRA, RCW 27.44.040(1), in the section of my memo discussing whether the Tribe has a “clear legal or equitable right.” Like many of my fellow BLS students, I struggled in my Elwha memo in terms of properly referring to the statutory authority. Providing a block quotation with the operative section of IGRA gives the reader adequate context for the paper’s analysis in this section.

Fourth, I re-worked the section on whether the “acts result in actual and substantial injury,” switching the second and third paragraphs to appropriately emphasize the key
This point was buried in the third paragraph of this section in my final draft, and switching these two paragraphs and tightening up the language helps clarify this key point in the mind of the reader.

Finally, I inserted language in my analysis on ASRA that clearly indicates that the civil damages under that section are not payable to the tribe. This was an unfortunate omission in my final draft—and inserting this language helps the reader see why IGRA is a better legal option for the Elwha.

I think that these revisions were effective in taking my Elwha memo to the next level. Based on the faculty feedback I received, I didn’t think that a “massive overhaul” of the memo was necessary. This allowed me to focus on several key components that polish the memo and help the reader understand the law.

WASHINGTON BRIEF

The difference between my rough draft and final draft of the Washington Brief is incredibly stark. Rather than feeling ashamed of the rough draft, I am very proud of it—this whole year I have struggled to learn how to “let loose” and live with a sub-par initial draft in order to “get things on paper.” In the past, I have suffered extreme writer’s block because my first drafts had to be “perfect.” This Washington Brief process was the first time that I actually used the rough draft as a rough draft. (There’s a novel concept!)

As a result, I had many revisions to make between the first and final drafts. I basically had to re-work most of the brief (although I did use key sections that were pertinent). My specific goals in this revision were: (1) change the tone and prose of the “Statement of Facts” to grab the reader’s attention while incorporating key points of the case at the trial level, (2) use point headings more effectively to break up the argument in “logical steps,” (3) flesh out the policy implications of a denial of severance and bifurcation at the trial court level to give context to the appellate review, and (4) prioritize and emphasize stronger arguments earlier in the brief.

There were a number of revisions that I made to
accomplish these goals. First, [_____] and I changed the prose and approach of the “Statement of Facts” so that it was more punchy, terse, and was more effective in giving equal attention to both the severance/bifurcation issue and the RICO issue. The opening lines illustrate this change. In the rough draft the opening line was, “Defendants Branden Morris and Edward Washington barely knew each other while consuming and selling drugs in Dorchester, a large and diverse Boston neighborhood.” In the revised draft this sentence evolved to, “Dorchester, Massachusetts is a dangerous place to grow up. With an increasing amount of violence due to pervasive criminal elements, it is only natural that those who live in this area, and more specifically, near Esmond Street, would seek safety through organization.” The rest of the Statement of Facts was developed so that it was terse and effective.

Second, the difference in my use of point headings is night and day between the rough and final drafts. In the first draft I only had two bland point headings—one for the sub-issue of severance and the other for the sub-issue of bifurcation. This meant that the analysis under each of these point headings was mushy and hard to break apart. For the final draft, I broke the argument down into specific and effective point headings—standard of review, individual arguments, and sub-arguments. This style is definitely more effective in showing the reader the progression of the argument.

Third, I fleshed out the policy implications of a denial of severance and bifurcation. In the initial draft my policy analysis consisted of fairly superficial citations of various studies showing prejudice. In the final draft, I broke these policy arguments down into compelling components. For example, I argued that a denial of severance and bifurcation encourages prosecutors to use a death penalty charge as a strategic maneuver to increase the likelihood of conviction of non-capital defendants. Similar arguments were persuasively stated.

Finally, I switched the structure of my argument in order to prioritize the most persuasive issue (bifurcation) and deemphasize the least persuasive issue (severance). By the end of the brief-writing process, it was clear to me that the de
novo standard of review on bifurcation was much more attainable than the abuse of discretion standard of review on severance. By switching the order of these arguments, my brief is much more persuasive to the reader.

These revisions were very effective in the development of a persuasive argument in brief form. Like I said, I am extremely proud of the dramatic difference between my first and final drafts.

Don’t forget to include your name on this self-assessment and your artifacts!