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I. INTRODUCTION

With the widespread criticism of legal education and the proposed changes to the American Bar Association (ABA) accreditation standards, law schools are looking for ways that they can better teach students to be lawyers. In fact, law schools may be facing a perfect storm for significant
changes in legal education with the recent release of two high-profile reports criticizing legal education, the major restructuring of law firms and practice because of the weakening economy, and the push to change the ABA’s accreditation standards.

In 2007, two major reports appeared, each of which criticized legal education and offered a series of recommendations on better preparing students for the practice of law. In Educating Lawyers: Preparation for the Practice of Law, best known as the “Carnegie Report,” the authors discuss how law schools are successful at teaching legal analysis to students using the Case Method, but criticize law schools for not adequately focusing on preparing students for the practice of law and the lawyer’s role in society. The report also criticizes legal education for not teaching enough practical skills and for failing to fully integrate the learning of analysis with ethical and professional training. At the same time the Carnegie Report was published, The Clinical Legal Education Association (CLEA) issued its own set of recommendations. The report, Best Practices for Legal Education (Best Practices), also criticizes legal education for not establishing appropriate learning outcomes and using

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Education and Beyond, 16 CLINICAL L. REV. 269 (2009) (stating that “best practices” is an inadequate concept and concluding “that it has no place in the world of legal education”); Roy Stuckey, “Best Practices” or Not, It Is Time to Re-Think Legal Education, 16 CLINICAL L. REV. 307, 312–13 (2009) (recommending that schools should try to achieve congruence in the program of instruction, progressively develop knowledge, skills and values, integrate the teaching of theory, doctrine and practice, and provide pervasive professionalism instruction and role modeling throughout all three years of law school); Judith Welch Wegner, Reframing Legal Education's "Wicked Problems", 61 RUTGERS L. REV. 867, 870 (2009) (illuminating “how responsibility should be allocated for lawyer preparation; why change in content alone does not result in enduring improvements in legal education; whether ‘thinking like a lawyer’ has a continuing place in legal education; and how the upper division can be fruitfully improved”).

4 See CARNEGIE REPORT, supra note 1; BEST PRACTICES, supra note 1.
5 See, e.g., Segal, supra note 1.
6 See ABA STANDARDS, supra note 2.
7 CARNEGIE REPORT, supra note 1, at 87–95.
8 Id. The Carnegie Report focused on how law schools need to teach the three apprenticeships—cognitive, practical, and ethical. See id. at 13–14; BEST PRACTICES, supra note 1, at 182–83. Although law schools tend to teach analytical skills well, these skills are taught in a way that is disconnected with the real life experience of working with clients and developing a professional identity. See CARNEGIE REPORT, supra note 1, at 87, 126–27.
effective assessment models to make law students better prepared for the practice of law. The report makes a series of recommendations on how to plan a curriculum, establish broad learning objectives for the school, develop specific learning objectives for each type of course, assess those learning outcomes, and best prepare students for the practice of law.

In 2009, the ABA began a full study centered around transforming its own accreditation standards by focusing on learning outcomes and assessment instead of the input measures it has traditionally used. All of this happened during one of the worst periods for law firms due to a weak economy.

These reports and events highlight the need to prepare law students to be practice-ready and to help make them better prepared for lifelong learning, something that goes to the core of what it means to be a lawyer. The problem, however, is that law schools generally fail to train students to be expert learners even though lawyers will be constantly learning while practicing law. In light of law schools’ general failure to teach students to be expert learners, this article discusses how to better prepare students for the practice of law through a more effective way of using formative assessment in lawyering skills courses and clinics. For purposes of this article, “doctrinal courses” are those that focus on teaching the substance of an area of the law, even though some skills may be

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9 Best Practices, supra note 1, at 7.
10 Id. at 3, 7.
11 Donald J. Polden, Statement of Principles of Accreditation and Fundamental Goals of a Sound Program of Legal Education, Am. Bar Ass’n (May 6, 2009), http://www.americanbar.org/groups/legal_education/committees/standards_review.html. Generally, the ABA has set its standards on input measures. Id. For example, law schools are evaluated on the size of the library, the faculty-student ratio, and the minimum amount of time a student spends in class before graduation. See also ABA Standards, supra note 2, at 23, 31, 44. The proposed standards focus on the learning outcomes schools expect of their students and ways that they will assess whether the students have met those learning outcomes. See ABA Draft, supra note 2.
12 See Segal, supra note 1.
13 Carnegie Report, supra note 1, at 87–95; Best Practices, supra note 1, at 1, 7.
14 Best Practices, supra note 1, at 48–49.
15 Id. at 1.
taught. Examples of doctrinal courses include contracts, torts, civil procedure, property, and constitutional law. “Skills courses,” however, are those that focus on teaching some particular lawyering skill. Examples of skills courses include legal research and writing, negotiation, contract drafting, clinics, and externships.

Specifically, this article focuses on ways that professors can use the formative assessment process to improve the metacognitive skills of law students so they are more successful at transferring their learning to the new and novel situations they will encounter in the practice of law. Essentially, the goal of formative assessment should be to move legal education away from a focus on an end product—a memorandum, motion, negotiation, oral argument, etc.—to the underlying process of developing these products.

Part II of this article focuses on the need to prepare law students to be expert learners because they will be constant learners in the practice of law. Part III details the concept of metacognition and its role in preparing students to be self-regulated learners. It discusses the components of metacognition, its role in law school, and the current push to include better metacognitive training in law school. Part IV details how formative assessment can be better utilized in improving the metacognitive skills of students. Specifically, it explains the best practices of formative assessment and how professors can adjust their feedback from a focus on assessing a product to assessing the process of learning. Part V explains how to use self-assessment surveys and portfolios to enhance the formative assessment process and help students become better self-regulated learners.

II. MOVING LAW STUDENTS FROM NOVICE TO EXPERT LEARNERS

For several decades, legal educators have debated the appropriate mix of substance, skills, and ethics in the law school curriculum. The current

17 Id.
18 Id.
19 Id.
20 Id.
criticisms of legal education and the proposed ABA accreditation standards continue this debate and force law schools to see what they can do to help make their students practice-ready and have the "competency that an entry level practitioner must have for effective, ethical, and responsible participation in the legal profession." To make law students practice-ready, most legal educators would agree that graduates need to leave law school with some minimal competencies, including critical thinking, problem solving, legal analysis, legal research, writing, and communication. Somewhat unique to law school is that the students come from a wide range of learning experiences and educational backgrounds, with most having little or no experience or skills in those minimum competencies.

The discussion about how to teach law students often omits one of the biggest components of legal education: the best way to train students to be lifelong learners. Because law schools cannot teach students every area of the law or every skill they will use as lawyers, the focus should be on teaching them how to transfer their learning in law school to the novel situations they will face in the legal profession. Furthermore, law schools need to teach them how to continue to draw upon their learning experiences during the practice of law to new situations they will certainly encounter. This requires that law schools move the students from novice learners to expert learners.

22 ABA STANDARDS, supra note 2.
23 Id.; MACCRATE REPORT, supra note 21, at 331–32 (recommending that law schools train students in several different skills, including problem solving, legal analysis, legal research, factual investigation, communication, counseling, negotiation, choosing between and counseling about ADR and litigation options, recognizing and resolving ethical dilemmas, and the organization and management of legal work).
24 See Preparing for Law School, AM. BAR ASS'N, http://www.americanbar.org/groups/legal_education/resources/pre_law.html (last visited Oct. 19, 2011). The ABA does not recommend a particular undergraduate major for law students, saying that “[s]tudents are admitted to law school from almost every academic discipline.” Id.
25 Id.
27 See MACCRATE REPORT, supra note 21, at 330.
28 Id.
29 See Tamana Van Gog et al., Instructional Design for Advanced Learners: Establishing Connections Between the Theoretical Frameworks of Cognitive Load and (continued)
Lawyers need to learn new material on a daily basis, whether that material is a legal concept, a procedural rule, or a completely new discipline that is the underlying substance of a legal problem. Those who are able to learn efficiently and thoroughly are able to handle the constant learning required of lawyers, and learning theorists describe these individuals as expert learners.

Examining a typical problem an employment lawyer may encounter illustrates how the practice of law requires constant learning, including subjects that are doctrinal, but also those outside of the study of law. The following is such an example.

An engineer who works for Company A developing new products announces on a Friday afternoon that he is leaving on Monday to work for a competitor, Company B. He invented one of Company A's most successful products. Company A wants to keep the employee from using the knowledge and skills he developed while working for Company A to compete with Company A. Company A is also afraid of losing its trade secrets to Company B.

The attorney hired by Company A has only two days to learn a wide variety of information, including:

- the science and engineering relevant to the product and company;
- any applicable state or federal laws;
- contract principles that might guide the legal action; and
- procedure associated with temporary restraining orders, preliminary and permanent injunctions, and ex-parte communications with the court.

Deliberative Practice, EDUC. TECH. RES. & DEV, Sept. 2005, at 73 (discussing research on how expert learners think and process information and focusing on the amount of effort expert learners put into their performance rather than the amount of knowledge they obtain in a particular domain). Expert learners are capable of learning and completing new tasks across several domains more successfully than novice learners. Id.

See MACCRATE REPORT, supra note 21, at 330.

Peggy Ertmer & Timothy Newby, The Expert Learner: Strategic, Self-Regulated, and Reflective, 24 INSTRUCTIONAL SCIENCE 1, 1 (1996) (explaining that an expert learner is a strategic, self-regulated, and reflective learner who uses different types of knowledge to bring about successful learning).

To protect his client, Company A, the attorney must apply the underlying standard for injunctions to various doctrinal concepts, including torts, covenants not to compete, breach of contract, and trade secrets. Finally, the attorney must do this with a full understanding of the structure and function of the respective companies.

An expert learner would be able to handle these questions and this situation much more effectively than a novice learner, especially given the short amount of time the hypothetical attorney has to develop and draft the appropriate legal documents. To help law students become expert learners, law schools need to do more to adapt their teaching so that students are able to adapt to situations like this employment law problem.

Expert learners are "those successful individuals who approach academic tasks with confidence, diligence, and resourcefulness." 33 Being an expert learner is not about how much knowledge the person has, but about that person’s “ability to implement appropriate regulatory strategies when they become aware that certain facts or skills are missing from their learning repertoires that are necessary for reaching desired academic goals." 34 For lawyers and law students, being an expert learner requires that they know what knowledge they have, what knowledge they lack, what they will need to learn, how to obtain that knowledge, how to apply that knowledge, and how to know that they are getting the right knowledge. 35 These are all metacognitive skills. 36

III. METACOGNITION AND SELF-REGULATED LEARNING

The most important skills law schools can teach students to make them better lifelong learners are metacognitive strategies. 37 Essentially, metacognition is the ability to regulate and control one’s learning. 38 There are many definitions of metacognition, but learning theorists essentially

33 Ertmer & Newby, supra note 31, at 1 (emphasizing that expert learners are self-directed and goal-oriented, and use knowledge in conjunction with effective cognitive strategies to enhance their opportunities to learn a wide array of information).

34 Id.


36 See infra note 38 and accompanying text.

37 Best Practices, supra note 1, at 172 ("Developing lifelong learning skills may be the most important goal of legal education.").

break it down into the knowledge of cognition, the regulation of cognition, and how those two connect. Put simply, it is the process of "thinking about thinking" and the ability to self-regulate one's learning with the goal of transferring learned skills to new situations. There are many metacognitive skills that everyone employs in the learning process: monitoring one's reading comprehension, evaluating one's process of learning, understanding the influence of outside stimuli on one's learning, and knowing when one lacks motivation, just to name a few. Most learners who employ these various metacognitive strategies do not even know that they are using them, but the students who use many metacognitive skills well are often the best learners. Consequently, students who develop good metacognitive abilities prior to law school are more likely to succeed in law school.

Metacognition also can be described as the internal voice people hear when they are engaged in the learning process—the voice that will tell them what they have to do to accomplish a task, what they already know, what they do not know, how to match their previous learning to the new

39 See id.
40 Emily Fox & Michelle Riconscente, Metacognition and Self-Regulation in James, Piaget, and Vygotsky, 20 EDUC. PSYCHOL. REV. 375, 383 (2008).
43 See Niedwiecki, supra note 41, at 64–65.
46 Id. at 103 (“The more efficient plans and, especially, strategies people are able to construct, the more likely they are to succeed.”); Nicol & Macfarlane-Dick, supra note 44, at 205 (“[L]earners who are more self-regulated are more effective learners: they are more persistent, resourceful, confident and higher achievers.”).
situation, when they do not understand what they are reading or learning, and how to evaluate their learning.\textsuperscript{48} It is this internal reflection and conscious control of the learning process that goes to the heart of metacognition.\textsuperscript{49}

Metacognitive skills are different from cognitive skills. Cognitive skills are the skills needed to perform a specific task, while "metacognitive skills involve an understanding of how that task is performed."\textsuperscript{50} Although cognitive skills are focused on a specific subject area, metacognitive skills "span multiple, often divergent subject areas and involve a greater degree of thinking about the learning process."\textsuperscript{51} After learning a cognitive skill, it can become an automatic process, while metacognition requires a deliberate process and active participation by the learner.\textsuperscript{52} For a law student, a cognitive skill would be the ability to find the law, understand the law, and apply the law.\textsuperscript{53} Cognitive skills are what law professors generally teach students in law school, whether it is legal analysis in a doctrinal class or drafting a legal document in a skills course.\textsuperscript{54} For example, students eventually become skilled at using the issue, rule, application, conclusion (IRAC) format to organize their writing, which is a cognitive skill.\textsuperscript{55} Determining when to modify the IRAC structure would be considered a metacognitive skill, which requires a much more complex and deliberate thought process.\textsuperscript{56} Some examples of cognitive skills and the corresponding metacognitive skills include:

\begin{itemize}
\item[Cognitive skills:]
\begin{itemize}
\item The ability to find the law, understand the law, and apply the law.
\item Legal analysis in a doctrinal class or drafting a legal document in a skills course.
\item Using the IRAC format to organize writing.
\end{itemize}
\item[Metacognitive skills:]
\begin{itemize}
\item Determining when to modify the IRAC structure.
\end{itemize}
\end{itemize}

\textsuperscript{48} See, e.g., Fox & Riconscente, supra note 40, at 383 ("Another aspect of the knowledge of one’s own mental capacity is the awareness of self as actor and as subject presumed in the use of inner speech for self-direction.").
\textsuperscript{49} Id.
\textsuperscript{50} Niedwiecki, supra note 41, at 42–43 (citing Schraw, supra note 42, at 113).
\textsuperscript{51} Id. at 43.
\textsuperscript{52} Id.
\textsuperscript{53} Id. at 58–60.
\textsuperscript{56} Niedwiecki, supra note 41, at 42–43.
<table>
<thead>
<tr>
<th>Cognitive Skill</th>
<th>Metacognitive Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding a case using online database</td>
<td>Determining when your research is finished</td>
</tr>
<tr>
<td>Briefing a case</td>
<td>Knowing when to develop a broad holding or a narrow holding from a case</td>
</tr>
<tr>
<td>Organizing a memo using IRAC or similar model</td>
<td>Knowing when to deviate from using IRAC or similar model</td>
</tr>
</tbody>
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Law schools do not focus enough on teaching metacognitive skills because the focus is on teaching doctrine and specific cognitive skills without enough emphasis on ensuring that students have the ability to transfer these skills and knowledge. As a result, students focus more on surviving in law school—to survive the class, exam, or law school itself—in general. The current assessment practices in law school also encourage the students to only focus on the end product. For example, many classes provide only a final exam or a final paper without giving the students the necessary feedback to improve student learning, so the students generally determine how to get the highest grade on the assignment without fully knowing if they used the correct process to get it.

In the employment problem above, a successful legal education would train the law student to look at this learning situation and know what needs to be learned, what is already known, where to locate the relevant information, and how much time it will take. These are all metacognitive strategies. Those with strong metacognitive skills are better at these steps.

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57 Id. at 34.
58 See Christensen, supra note 47, at 58 (noting that some law students are “performance-oriented learners” who are led to believe that success is measured by high grades and academic honors rather than comprehension). Students will often focus on how to get to the end product for the class by asking questions like: What do I need to know for the exam? How do you do that? Is this on the final? These questions are focused more on getting through the course instead of determining how the material or skill transfers to the practice of law. Id.
59 Niedwiecki, supra note 41, at 68.
60 Id.
61 Id. at 45.
62 Id.
in the learning process and better at determining the appropriate legal action and documents that need to be filed with the court, so legal education should do more to improve the metacognitive skills of their students.

A. Components of Metacognition

Learning theorists break metacognition into two main components: knowledge of cognition and the regulation of cognition. The knowledge of cognition involves an awareness of which knowledge and skills a person brings to the learning task, an awareness of what the new task requires, and matching the knowledge and skills to the new task. Because law students are adult learners, they have many experiences that can enhance or hurt their learning in law school and influence their metacognitive abilities.

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63 Schraw, supra note 42, at 114. Some learning theorists further define metacognition to include declarative, procedural, and conditional knowledge. See Niedwiecki, supra note 41, at 43 n.44.

64 Schraw, supra note 42, at 114; Niedwiecki, supra note 41, at 44.

65 Schraw, supra note 42, at 117. For a discussion on the many issues related to adult learners, see, for example, Phil Askham, Context and Identity: Exploring Adult Learners' Experiences of Higher Education, 32 J. FURTHER & HIGHER EDUC. 85, 89 (2008) (discussing how part-time, work-based, adult learners deal with the experience of higher education for the first time); John F. Check, Teaching Learning Preferences of the Adult Learner, 105 EDUCATION 107, 108 (1984) (“Adults, as opposed to children and adolescents, have a more definite purpose in attending classes, are more in command of their destiny, and bring to the classroom knowledge and experience they have encountered in their lives thus far.”); Andrea Honigsfeld & Rita Dunn, Learning-Style Characteristics of Adult Learners, DELTA KAPPA GAMMA BULLETIN, Winter 2006, at 14, 16 (2006) (emphasizing that no two adult learners approach the same task with identical strategies, as some are visual, tactual, auditory, or kinesthetic learners who become bored, frustrated, overwhelmed, or unable to cope with the challenges of higher education); Barbara Merrill, Learning and Teaching in Universities: Perspectives from Adult Learners and Lectures, 6 TEACHING HIGHER EDUC. 5, 14 (2001) (discussing the idea that mature students have the advantage of having life experiences but often have a difficult time actually conceptualizing and theorizing about these experiences); Jovita M. Ross-Gordon, Adult Learners in the Classroom, NEW DIRECTIONS FOR STUDENT SERVS., Summer 2003, at 43, 50 (2003) (stating that “although most adult students go on to achieve at levels equal to or greater than those of traditional-aged students,” educators need to recognize that many return to college studies with anxiety about their abilities to be successful learners in the academic setting, and these anxieties must be taken into account when developing curriculum).
Adult learners often share some common characteristics. They tend to be more motivated and focused on achieving a goal in a learning experience. They also bring with them life experiences that may help or hinder their learning in law school. These experiences may be academic or work-related. Some learning habits that were successful for previous learning tasks will not be successful in law school. For example, if a student did well on exams in undergraduate classes by only studying the night before taking the exam, the student may incorrectly believe that the same approach will result in success on law school exams. In fact, a recent study by professors at Wake Forest Law School showed that most students come to law school overstating some of their abilities.

Before approaching any learning task, people who have strong metacognitive skills, especially adult learners, will consciously evaluate what they bring to the learning experience and try to match those skills with the requirements of the task on hand. In the previous employment law problem, the attorney may have worked on another covenant not to compete, but with a different type of job. The attorney could draw upon previous experience for a basic idea of the law, which is necessary to identify the need for additional research. The attorney may determine that the previous documents are a sufficient starting point, but may also

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66 See Oring Gom, Motivation and Adult Learning, 10 CONTEMP. PNG STUD.: DWU RES. J. 19 (2009) ("As people mature their readiness to learn becomes oriented increasingly to the developmental tasks of their social role... [and their] motivation to learn is internal."); Ross-Gordon, supra note 65, at 48 (reviewing several studies on adult learners and finding that they are "goal oriented, responsible, and self-directed").

67 See Check, supra note 65, at 111 (stating that adult learners enter "class with a large accumulation of experiences"); Gom, supra note 66, at 19 ("As people mature they accumulate a growing reservoir of experience that becomes an increasing resource for learning.") (quoting M.S. Knowles et al., Andragogy in Action: Applying Modern Principles of Adult Education 12 (1984)).

68 Niedwiecki, supra note 41, at 46-47.

69 Mariam E. Felsenburg & Laura P. Graham, A Better Beginning: Why and How to Help Novice Legal Writers Build a Solid Foundation by Shifting Their Focus from Product to Process, SOCIAL SCIENCE RESEARCH NETWORK 1 (May 17, 2011). The study surveyed incoming law students in 2007 and 2009 about their experiences and expectations as they entered law school. Id. at 1-2. Seventy percent of the respondents in the 2007 survey were confident in their writing, and sixty-two percent of the respondents in the 2009 thought they were extremely or very confident in their general writing ability. Id. at 2.

70 Ertmer & Newby, supra note 31, at 11.
recognize that some sections will need to be rewritten based on the type of employment in the current case. Once the learner has consciously begun to match knowledge and skills with the new task, the learner moves to the next step in the learning process—the regulation of cognition.

The regulation of cognition involves the control over a person's learning process. It involves three steps: planning for the task, monitoring the learning process involved in the task, and evaluating the final outcome of the task. Once the learner is done evaluating the final outcome of the task, the learner starts the process over on the next task, incorporating the learning that took place on the previous task when examining the more developed knowledge of cognition. Expert learners will make this process circular for every learning experience they encounter, taking the information about the learning process from one task and incorporating it into the metacognitive process of the next task.

The planning stage involves matching the skills that the learners bring to the task with the cognitive skills required of the task. To do so, the learners must understand the goals of the task and select the strategies needed to match those with the personal resources they bring to the task. An example of planning for a task would be determining the amount of time it will take. Learners will examine their goals, determine their strategies, and decide which skills to employ and which work conditions will allow them to accomplish the task.

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71 Niedwiecki, supra note 41, at 61.
72 Schraw, supra note 42, at 114.
73 Id. at 115 (noting that metacognitive functions include activities such as planning how to approach a given learning task, monitoring comprehension, and evaluating progress toward the completion of a task).
74 Id. 114–15 ("Knowledge of cognition refers to what individuals know about their own cognition or about cognition in general [and it includes at least three different kinds of metacognitive awareness: declarative, procedural, and conditional knowledge."). See also Carnegie Report, supra note 1, at 110 (noting that central to this knowledge of self and self-regulation are commitment, attitudes, and attention, requiring the learner to reflect upon and evaluate the final outcome of the task).
75 Schraw, supra note 42, at 115.
76 Niedwiecki, supra note 41, at 61.
77 Id. at 61–62.
78 Ertmer & Newby, supra note 31, at 20; Schraw, supra note 42, at 115.
The monitoring stage requires that the learners follow the learning plan and evaluate whether the strategies are working.\textsuperscript{79} It also involves modifying the strategies if they are not working.\textsuperscript{80} A good example of monitoring occurs whenever learners read material they did not understand.\textsuperscript{81} They may determine that a paragraph in a case did not make sense. Because the learner monitored comprehension and realized that it was lacking, the learner may reread the paragraph, look up unfamiliar terms in a dictionary, or reread previous sections to get a better understanding of the paragraph in context.\textsuperscript{82} During the monitoring phase, the learners ask themselves if they understand the material, when they will reach the end of their task, and whether they should add outside materials to better understand the task.\textsuperscript{83}

The final stage of regulating cognition involves evaluating the learning task.\textsuperscript{84} Learners determine whether the plan resulted in successful learning, whether they were able to avoid or manage obstacles, and whether they met the goals established in the planning phase.\textsuperscript{85} In this final stage, learners evaluate whether the approach or strategies worked, when they can use that approach again, and what new goals they have going forward.\textsuperscript{86} This information, gleaned during the evaluating stage, will be used to help plan future learning and cognitive tasks.\textsuperscript{87} An example of evaluating is determining if the time set aside to complete the task was sufficient, and whether more or less time will be required for similar tasks in the future.\textsuperscript{88}

\textsuperscript{79} Ertmer & Newby, supra note 31, at 12–13.
\textsuperscript{80} Id. at 13.
\textsuperscript{81} Debra Moss Curtis & Judith R. Karp, "In a Case, In a Book, They Will Not Take a Second Look!" Critical Reading in the Legal Writing Classroom, 41 WILLAMETTE L. REV. 293, 307 (2005).
\textsuperscript{82} Id.
\textsuperscript{83} Ertmer & Newby, supra note 31, at 20; Schraw, supra note 42, at 115.
\textsuperscript{84} Niedwiecki, supra note 41, at 62.
\textsuperscript{85} Id.
\textsuperscript{86} Id. at 44.
\textsuperscript{87} Id.
\textsuperscript{88} Ertmer & Newby, supra note 31, at 20; Schraw, supra note 42, at 115.
B. The New Push for Metacognitive Training in Law School

Legal educators are beginning to recognize the importance of metacognition training in law school. Although most legal educators may not realize that they are teaching metacognitive skills, many techniques they already employ enhance their students' metacognitive abilities. For example, using the Case Method to continually ask students how they got to the answer or to adjust a hypothetical to get students to understand a nuance in a rule requires the students to examine their thought processes—the very definition of metacognition. Simply asking students a question without further asking how they got to that answer will not provide insight into the student’s metacognitive abilities. The current problem with the use of the Socratic Method, however, is that it teaches metacognition implicitly and is only likely to help students who already have strong metacognitive strategies. For example, many professors simply do not explain the basis for the particular questions or the types of reasoning that they are asking the students develop.

By design, skills courses explicitly teach metacognitive strategies by focusing on the process as well as the end product. In fact, the Carnegie Report recognized the difference between teaching a doctrinal law class

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89 Carnegie Report, supra note 1, at 91.
90 Anthony D’Amato, The Decline and Fall of Law Teaching in the Age of Student Consumerism, 37 J. Legal Educ. 461, 473 (1987) (noting that the Socratic Method teaches students to teach themselves how to define and attack a problem); Orin S. Kerr, The Decline of the Socratic Method at Harvard, 78 Neb. L. Rev. 113 116–17 (1999) (discussing how “[p]roponents of the Socratic Method extol its capacity to teach sophisticated legal reasoning effectively to a large class of students” because “[s]tudents learn legal analysis by doing it, either in their own minds or in an oral exchange with the professor”); Karl N. Llewellyn, The Current Crisis in Legal Education, 1 J. Legal Educ. 211, 212–13 (1948) (stating that the method allows “something in the nature of a real discussion class which can enlist active participation from many, and also silent participation of a whole group ranging up to two hundred or more”).
91 Fox & Riconscente, supra note 40.
92 See Niedwiecki, supra note 41, at 34–35.
93 Id. at 44–46.
94 Id. at 34.
95 See, e.g., Eric Easton Et Al., Sourcebook on Legal Writing Programs 5–6 (Aspen 2006) (noting that first year legal research courses should focus on expanding “instruction in legal analysis, research, and writing skills” to achieve the end result of “teach[ing] students to think and communicate like lawyers”).
and a skills-based course, and the latter's effect on improving metacognitive learning. In a writing course, for example, "students are not told to simply figure things out for themselves" when they are required to learn in context, such as expressing their learning in writing and through solving a problem. By learning in context, the students go through several stages of learning, including receiving feedback and practicing the activity. The last step of the learning process, according to the Carnegie Report, includes a focus on strategies for improvement, recognizing that all learning will impact future learning:

This last step, which psychologists call metacognition, turns the student's activity back on itself [to] produce awareness in the student of what is being learned—a "second order" or reflective awareness; then the process is reiterated, with gradually more difficult and complex tasks, toward the aim of improved competency in writing.

Because all learning impacts future learning, it is imperative that law schools and law professors evaluate their students' learning process to ensure a positive impact on future learning. This also helps to avoid perpetuating students' mistakes while learning a cognitive skill.

The Carnegie Report and Best Practices further develop this new emphasis in legal education by consistently emphasizing the importance of incorporating metacognitive training into the law school curriculum. The CLEA's recommendations in Best Practices for Legal Education include two that go to improving metacognitive instruction and training. One recommendation is designed to "help students improve their self-directed learning skills," an essential component of metacognition. The authors describe this recommendation and the metacognitive process as follows:

It involves a cyclical process in which self-directed learners appropriately classify the demands of a learning

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96 Carnegie Report, supra note 1, at 107.
97 Id. at 109.
98 Id.
99 Id. at 109–10.
100 Id. at 87–95; Best Practices, supra note 1, at 1–5.
102 Id. at 127.
task, plan strategies for learning what needs to be learned, implement those strategies while self-monitoring the effectiveness and efficiency of the chosen strategies, and reflect on the success of the process afterwards, especially how the learner will handle a similar, future task.  

The Carnegie Report emphasizes the need to make students better self-regulated learners and suggests improving teaching of metacognitive skills when it states:

> [P]rofessional schools cannot directly teach students to be competent in any and all situations; rather, the essential goal of professional schools must be to form practitioners who are aware of what it takes to become competent in their chosen domain and to equip them with the reflective capacity and motivation to pursue genuine expertise. They must become “metacognitive” about their own learning.

The proposed ABA accreditation standards also make reference to the need to teach students better self-assessment strategies, arguably the most essential metacognitive skill for the practice of law. In its most recent report, the Student Learning Outcomes Subcommittee to the ABA Section of Legal Education and Admissions to the Bar Standards Review Committee referred to self-reflective learning and self-assessment throughout the recommendations, including the following standard:

> Standard 302(b)(3)—the learning outcomes shall include “a depth and breadth of other professional skills sufficient for effective, responsible, self-reflective and ethical participation in the legal profession.”

> Interpretation 302-2—“Interviewing, counseling, negotiation, fact development and analysis, conflict resolution, organization and management of legal work, collaboration, cultural competency, and self-evaluation are
among the professional skills that could fulfill Standard 302(b)(3).”

Interpretation 303-2—The courses should include “multiple opportunities for students to perform tasks with appropriate feedback and self-evaluation.”

Interpretation 304-3—“Law schools should encourage development of one’s ability to assess... performance, professionalism and level of competence.”

Although legal education is beginning to recognize the need for training students to be better self-regulated learners and how to incorporate better metacognitive strategies, law schools are not implementing enough changes to teach these important skills. One way to improve the metacognitive strategies of students is to attack and critique their learning processes instead of simply assessing the end product. The most effective way to attack the process is through the formative assessment process. Legal education, therefore, should explore ways to analyze and assess the process of students’ learning with the goal of making them expert learners. Assessing students’ learning process helps keep students from repeating mistakes in law school and the practice of law.

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107 Id.
108 Id.
109 Id.
110 John M. A. DiPippa & Martha M. Peters, The Lawyering Process: An Example of Metacognition at Its Best, 10 CLINICAL L. REV. 311, 312 (2003) (challenging teachers and readers to become aware of their own thinking, including any personal variables, task variables, and strategies). See also Kowalski, supra note 3, at 53 (explaining that because human beings tie their learning to very specific patterns, any solution to the transfer problem in law school must involve the search for highly inclusive meta-schematics that can span multiple contexts, as well as stimulate students to access those cognitive maps through learner motivation and metacognitive strategies).
111 Jerome Frank, A Plea for Lawyer Schools, 56 YALE L.J. 1303, 1303–04 (1947) (criticizing legal education based on the Case Method for its lack of practical application). See also Christensen, supra note 47, at 75.
112 See DiPippa & Peters, supra note 110, at 311.
113 See BEST PRACTICES, supra note 1, at 235–36.
IV. TEACHING PROCESS INSTEAD OF PRODUCT THROUGH EFFECTIVE FORMATIVE ASSESSMENT TECHNIQUES

Most law school classes teach students to work toward an end product.\(^{114}\) In a purely doctrinal class, the students work toward a final exam.\(^{115}\) In a skills-based course, the students work toward a final project such as an office memorandum, a motion or appellate brief, a negotiation, or a trial.\(^{116}\) In each type of course, students focus on the goal of producing a product. Additionally, law schools and current ABA accreditation standards emphasize passing the bar exam, the ultimate end product.\(^{117}\)

In doctrinal classes, many professors use some form of what is known as the Socratic Method or Case Method with the hope that the students will eventually mimic the reasoning and analytical skills developed through the questioning inherent in this method.\(^{118}\) In doctrinal classes, professors ask questions and the students follow up with answers.\(^{119}\) Eventually, the students are able to predict the questions and develop a technique for answering them.\(^{120}\) The students then spend their time learning how to anticipate the questions the professor is going to ask.\(^{121}\) The goal of using this method is to get the students to practice analytical reasoning; to answer

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115 Id.


117 See ABA STANDARDS, supra note 2. The only outcomes assessment standard in the current version of the ABA accreditation standards involves a schools bar passage rate. Id.

118 Phillip E. Areeda, The Socratic Method: A Lecture at Puget Sound, 109 Harv. L. Rev. 911, 921 (1996) (“To have a successful [S]ocratic discussion, the instructor must maintain control [to] keep the development clear, orderly, and moving.”); Ruta K. Stropus, Mend It, Bend It, and Extend It: The Fate of Traditional Law School Methodology in the 21st Century, 27 Loy. U. Chi. L.J. 449, 453 (1996) (noting that the Socratic Method was meant primarily to foster analytical skills, encourage independent learning, and provide students with the opportunity to practice and refine verbal and rhetorical skills).


120 Areeda, supra note 118, at 922.

121 Id.
questions and think "on their feet"; to use deductive, inductive, and analogical reasoning; to solve hypothetical problems; and to engage in synthesis.\textsuperscript{122} Often, however, there is a lack of explicit discussion about the types of reasoning or reasoning skill being taught.\textsuperscript{123} The students frequently do not know that the questioning is meant to develop their synthesis, analogical, inductive, and deductive reasoning skills.\textsuperscript{124} Because professors do not usually detail or explicitly discuss the goals of this method, they are engaging in implicit teaching—the students are simply expected to understand the types of reasoning without the professor ever telling them what they are doing.\textsuperscript{125} Implicit teaching is likely a result of professors mimicking what and how they were taught when they were students.\textsuperscript{126} Some professors believe that the students should already know that the Socratic Method is testing their reasoning skills, and others believe that being more explicit about the underlying thought process is giving the


\textsuperscript{123} See Niedwiecki, \textit{supra} note 41, at 34; Schnee, \textit{supra} note 122, at 116.

\textsuperscript{124} See Niedwiecki, \textit{supra} note 41, at 34.


\textsuperscript{126} See James Casner, \textit{Are Law Professors Right for the Job?}, LEARNING AND THE LAW, Spring 1975, at 37, 38 (1976); Morrison Torrey, \textit{You Call that Education?}, 19 WIS. WOMEN’S L.J. 93, 104 (2004); Elyce H. Zenoff & Jerome A. Barron, \textit{So You Want to Hire a Law Professor?}, 33 J. LEGAL EDUC. 492 (1983). Most professors come to teaching law without any formal training on educational psychology, learning theory, or principles of effective teaching. See Niedwiecki, \textit{supra} note 41, at 36.
students too much information. The problem, however, is that this process fosters an environment where the students focus solely on getting to the answer or developing an end product. The failure to explicitly detail the underlying thought process that gets the students to the answer or end product has a detrimental effect on the students’ ability to transfer their learning to new and novel situations.

A similar problem occurs in skills-based courses. Here, professors teach students how to perform a skill instead of the underlying reasoning for doing so. Skills-based courses are often designed to teach formulas—CREAC, IRAC, etc. Professors may teach students how to produce legal documents, work with a mediator, or present evidence to a court. These cognitive abilities and skills are essential, but professors lose an important teaching opportunity when they do not focus on the reasons for, and times to use, metacognitive skills.

To better teach students to transfer cognitive skills to new and novel situations, professors

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127 See Michael Hunter Schwartz, supra note 35, at 467. In this article, Schwartz discusses the different views professors may have about law students, including:
- Some students have an inability to learn what they need to learn in law school;
- We are already doing everything we can to teach the students; and
- Students could do better if they just worked harder. Id. at 449–50.

128 Downs & Levit, supra note 114, at 822–23 (1997); Niedwiecki, supra note 41, at 53.

129 Niedwiecki, supra note 41, at 34. See also Stropus, supra note 118, at 455–65 (noting the inadequacies of the Socratic Method); Robin A. Boyle & Rita Dunn, Teaching Law Students Through Individual Learning Styles, 62 ALB. L. REV. 214, 220–21 (2001). The previous article suggests that self-regulation and metacognition should be employed by law professors to teach students to be aware of the learning process by teaching “strategies for time management, efficient reading, note taking, review and problem solving.” Id. at 220–21. This can be done primarily by teacher-student individual conferences to tackle personal learning styles, strengths, and weaknesses of the student. Id. at 221. The article then discusses the strategies that should be employed by professors to achieve successful results. Id. at 221–23.

130 Niedwiecki, supra note 41, at 34.


132 See Niedwiecki, supra note 41, at 61.

133 Id.
should focus on training students to self-regulate their learning by explicitly teaching metacognitive skills and using more effective formative assessment techniques.\(^{134}\)

A. Assessment in Law School

All law professors engage in some type of assessment, whether they grade final exams or provide written feedback on papers throughout the course.\(^{135}\) Whether the professor uses final exams as a form of summative assessment, or a series of drafts on papers as formative assessments, the goal of assessment should be on improving student learning.\(^{136}\) Unfortunately, law professors may only view assessment as a way to determine whether the students are able to apply what they learned over the course of the semester and to determine grades in a course.\(^{137}\)

In 1967, educational psychologist Michael Scriven identified a distinction between two types of educational assessments—summative and formative.\(^{138}\) Scriven drew the distinction based on the goals of each type

\(^{134}\) *Id.* at 60–61.


\(^{136}\) Id. (noting that when assessment “is used appropriately to inform instruction, it can enhance student learning as well as document it”); Jarene Fluckiger et al., *Formative Feedback: Involving Students as Partners in Assessment to Enhance Learning*, 58 C. TEACHING 136, 136–37 (2010) (explaining that the classroom environment should be focused on improving student learning by teaching students to change their own learning tactics rather than assigning grades); Jon. F. Schamber & Sandra L. Mahoney, *Assessing and Improving the Quality of Group Critical Thinking Exhibited in the Final Projects of Collaborative Learning Groups*, 55 J. GEN. EDUC. 103, 105 (2006) (discussing the need for institutions to assess whether standardized tests or other institution-specific measures are useful in assessing skill and student learning); Philip Vickerman, *Student Perspective on Formative Peer Assessment: An Attempt to Deepen Learning?*, 34 ASSESSMENT & EVALUATION HIGHER EDUC. 221, 226–28 (2009) (finding that a formative peer assessment in the classroom improved student learning by enhancing students’ content knowledge as well as their self-awareness and confidence).

\(^{137}\) Garfield, *supra* note 135.

\(^{138}\) See Rick Stiggins, *From Formative Assessment to Assessment FOR Learning: A Path to Success in Standards-Based Schools*, PHI DELTA KAPPAN, December 2005, at 324, 326; Dylan Wiliam & Paul Black, *Meanings and Consequences: A Basis for Distinguishing Formative and Summative Functions of Assessment?*, 22 BRIT. EDUC. RES. J. 537, 537 (continued)
of assessment and how they are used in the learning process. Generally, summative assessment refers to the process of evaluating whether a student has satisfied the learning outcomes of a course, while formative assessment refers to the intermediate feedback given to students to help them learn and complete some educational task.

(1996). Because governments in Western Europe have traditionally regulated higher education more than their United States counterparts, colleges and universities in Europe have faced developing assessment models well before they became more prevalent in the United States.

During the 1970s and the 1980s the Western European higher education systems have been confronted with a number of far-reaching changes. Most of these changes can be related in one way or another to a shift in governmental strategies towards higher education. A major underlying political force was the rise to power of conservative governments in many of these countries. The so-called ‘value-for-money’ approach of these governments with respect to the public sector led to the end of the more or less unconditional government funding of public higher education. In practice this implied, among other things, that public funding of higher education was increasingly becoming linked to the performance of higher education institutions. As a consequence, the question of how to assess the performance, or quality, of higher education became one of the central issues in Western European higher education in the [1990s].

Frans A. van Vught & Don F. Westerheijden, Towards a General Model of Quality Assessment in Higher Education, 28 HIGHER EDUC. 355, 359 (1994). In the United Kingdom, the move toward formal assessment in higher education formalized in the Further and Higher Education Act of 1992. Id. at 362. As a result, a great deal of research on assessment in higher education has been completed in the U.K. to comply with these changes and additional requirements. Id. at 363–65. Much of this research guides the analysis in this paper. Id. at 356–57.

See Stiggins, supra note 138, at 326.

Id. See also Maddalena Tarras, Assessment—Summative and Formative—Some Theoretical Reflections, 53 BRIT. J. EDUC. STUD. 466, 468 (2005) (explaining that summative assessment is a judgment that occurs at the end of an assessment that encapsulates all given evidence and is viewed as a final judgment).

Id. at 326, 328 (citing Michael Scriven, The Methodology of Evaluation, in PERSPECTIVES OF CURRICULUM EVALUATION 74–75 (Ralph W. Tyler, Robert M. Gagné & Michael Scriven eds., 1967) (explaining that as students engage in the assessment process, (continued)
Summative assessment evaluates how much learning has occurred in the class at a particular moment in time. Its purpose is to measure the success of the students in a course, and in most law schools, the relative abilities of the students in a course. Outside of law schools, summative assessment is also used to measure the success of a school or program. Examples of summative assessment tools used in law school are final exams and the state bar exam.

Formative assessment, however, is specifically intended to provide feedback during the learning process to improve the students' learning. Formative assessment generally occurs before summative assessment. Formative assessments provide information to both the students and the teacher so that they can adjust the learning and teaching process to promote they are able to see their improvement, and therefore, are motivated to continue to learn);

Tarras, supra note 140, at 468 (explaining that formative assessment requires feedback that can determine a "gap" between the work being assessed and the required standard, and how to close that gap).

142 Stephen Chappuis & Jan Chappuis, The Best Value in Formative Assessment, EDUC. LEADERSHIP, Dec. 2007–Jan. 2008, at 14, 15 (determining that summative assessment can be used to determine a student’s performance on important tests as well as any additional help that may be needed).

143 Id.

144 Steve Sheppard, An Informal History of How Law Schools Evaluate Students, with a Predictable Emphasis on Law Schools Final Exams, in 2 THE HISTORY OF LEGAL EDUC. IN THE UNITED STATES 815, 815–16 (Steve Sheppard ed., 1999). Many law schools require that the students in a course be graded on a curve or use some form of grade normalization. Id. at 831.

145 See Chappuis & Chappuis, supra note 142, at 15.

146 Sheppard, supra note 144, at 815–16, 823.

147 See Fluckiger et al., supra note 136, at 136 (describing that formative assessment helps students enhance their own learning and provides informed instruction); Schamber & Mahoney, supra note 136, at 105–57 (assessing a group project geared toward working on assessment techniques will enhance critical thinking skills for students involved who have taken ideas, criticism, tools, and information from their peers); Vickerman, supra note 136, at 222–24, 226–27 (2009) (explaining that formative assessment has helped students engage in deep learning rather than surface learning); Wiliam & Black, supra note 138, at 538, 545 (finding that assessment is intended to produce results that are used to help students achieve set goals).

148 Chappuis & Chappuis, supra note 142, at 15.
further learning.\textsuperscript{149} It is an ongoing process that requires frequent testing, appropriate feedback, and additional opportunities to improve learning.\textsuperscript{150} Formative assessment tools used in law schools include mid-term exams, feedback on drafts of student papers, and short reflective papers throughout the course.\textsuperscript{151}

Institutionally, one of the main purposes of assessment in law schools is to award grades to students, which are then used by law school faculty and administrators to make certain decisions.\textsuperscript{152} Law school grades are used to rank students, determine who can graduate, and provide employers with information about students' relative competency.\textsuperscript{153} Some schools use a grade point average below a required minimum to determine whether a student will be dismissed.\textsuperscript{154} Missing from these institutional uses is the most important goal of assessment—evaluating the school's curriculum and course instruction to determine if there are ways to improve student performance and learning.\textsuperscript{155}

\begin{itemize}
  \item \textsuperscript{149} Id. at 15–18; Regina M. Panasuk & John LeBaron, \textit{Student Feedback: A Tool for Improving Instruction in Graduate Education}, 120 \textit{EDUC.} 356, 359 (2000); Arthur Best, \textit{Student Evaluations of Law Teaching Work Well: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree}, 38 \textit{SW. L. REV.} 1, 16 (2008).
  \item \textsuperscript{150} See Panasuk & LeBaron, supra note 149, at 359.
  \item \textsuperscript{154} Sheppard, \textit{supra} note 144, at 823.
  \item \textsuperscript{155} Nicol & Macfarlane-Dick, \textit{supra} note 44, at 200.
\end{itemize}
Another major criticism of legal education focuses on the lack of formative assessment early in a course. Instead, students typically get feedback only on a final exam, and that feedback is not likely to improve a student's performance on subsequent exams. A number of factors make it difficult to include formative assessment in law school classes, including the large size of many doctrinal classes, the time constraints associated with being a professor (i.e., service and scholarship), and the lack of training on providing proper feedback to students. As a result, the law school assessment process omits many important elements, including the goal of improving the students' ability to self-assess and self-regulate their learning. By using the assessment process more effectively, especially

156 See, e.g., Haddock, supra note 152, at 546 (explaining that feedback is most useful when allowing students to revise their thinking, a part of learning that is usually absent from the law school curriculum); Kissam, supra note 152, at 465 (explaining that law schools purposely rank their students in a way that is easy for large corporate firms to know who they want to hire because it reflects a law student's ability to excel at the workplace compared to other students); Lasso, supra note 151, at 79 (explaining that the ideal goal of assessment should be to help teachers discover whether their students have achieved the learning outcomes of a particular course and help them achieve these learning outcomes); Grant H. Morris, Preparing Law Students for Disappointing Exam Results: Lessons from Casey at the Bat, 45 SAN DIEGO L. REV. 441, 448 (2008) (describing the law school classroom as a place where students get little to no feedback on how they are doing, which contributes to students' feelings of inadequacy).

157 See, e.g., C. Sheppard, supra note 151, at 180 (arguing that first year law courses that use the traditional one-examination approach fail to adequately assess students).

158 Lasso, supra note 151, at 79, 93–94 (suggesting that professors should learn how to teach self-learning strategies because many teachers do not currently assess students properly nor advise students to teach themselves); Emily Zimmerman, An Interdisciplinary Framework for Understanding and Cultivating Law Student Enthusiasm, 58 DEPAUL L. REV. 851, 881, 896–97 (describing that having one exam to determine the success of a student lacks any formative assessment that professors must provide in order for students to become well-adjusting practicing lawyers, a part of law curriculum professors commonly overlook). See also Mantz Yorke, Formative Assessment in Higher Education: Moves Toward Theory and the Enhancement of Pedagogic Practice, 45 HIGHER EDUC. 477, 483 (2003) (listing the pressures that are common to higher education professors and instructors).

159 Nicol & Macfarlane-Dick, supra note 44, at 215; Lasso, supra note 151, at 93.
through the formative assessment process, law schools can improve their students' learning abilities and sharpen students' metacognitive skills.\textsuperscript{160}

### B. Proper Use of Formative Assessment in Law School

Two researchers who lead the field on formative assessment are Paul Black and Dylan Wiliam.\textsuperscript{161} These two educational theorists define formative assessment broadly and include anything the students and teachers do in the learning process that can provide information on ways to adjust teaching and learning.\textsuperscript{162} Formative assessment "is to be interpreted as encompassing all those activities undertaken by teachers, and/or by their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged."\textsuperscript{163} Under this definition, the focus of formative assessment is on a joint process between the student and teacher.\textsuperscript{164} It includes several different techniques, including many that already occur in law school classrooms—discussions, listening to and observing students, asking questions, and reading students' written work.\textsuperscript{165}

\begin{itemize}
  \item \textsuperscript{160} Vickerman, \textit{supra} note 136, at 222–23.
  \item \textsuperscript{161} Paul Black & Dylan Wiliam, \textit{Assessment and Classroom Learning}, 5 \textbf{ASSESSMENT EDUC.: PRINCIPLES, POL'Y & PRAC.} 7 (1998); Nicol & Macfarlane-Dick, \textit{supra} note 44, at 204 (finding that Black and Wiliam have compiled 250 studies of feedback since 1988); Graham Gibbs & Claire Simpson, \textit{Conditions Under Which Assessment Supports Students' Learning}, 1 \textbf{LEARNING & TEACHING HIGHER EDUC.} 3, 9 (2004) ("Black & Wiliam's (1998) comprehensive review of formative assessment emphasizes the extraordinarily large and consistent positive effects that feedback has on learning compared with other aspects of teaching."); D. Royce Sadler, \textit{Formative Assessment: Revisiting the Territory}, 5 \textbf{ASSESSMENT EDUC.} 77, 77 (1998) (explaining that Black & Wiliam drew together research that is continuously being identified as formative assessment).
  \item \textsuperscript{162} Black & Wiliam, \textit{supra} note 161, at 7. \textit{See also} Nicol & Macfarlane-Dick, \textit{supra} note 44, at 199 ("Formative assessment refers to assessment that is specifically intended to generate feedback on performance to improve and accelerate learning.").
  \item \textsuperscript{163} Black & Wiliam, \textit{supra} note 161, at 7.
  \item \textsuperscript{164} Wiliam & Black, \textit{supra} note 138, at 543 ("To qualify as feedback, as well as alerting us to the existence of a gap, the information must actually be useful in closing the gap between actual and desired levels of performance."); Panasuk & LeBaron, \textit{supra} note 149, at 359 (explaining that the central focus of feedback should be to educate both the student and the teacher by evaluating a student’s needs and a professor’s ability to meet those needs).
  \item \textsuperscript{165} Yorke, \textit{supra} note 158, at 481; Nicol & Macfarlane-Dick, \textit{supra} note 44, at 200.
\end{itemize}
Black and Wiliam conducted an extensive review of more than 250 articles and books on formative assessment and found that formative assessment produced significant improvements in student learning when compared to student learning without formative assessment.\textsuperscript{166} The level of improvement correlates to the quality of the interactions between the student and the teacher and whether the student and the teacher subsequently use the information provided during the formative assessment process.\textsuperscript{167} Regardless of these factors, their review of the studies showed that “attention to formative assessment can lead to significant learning gains.”\textsuperscript{168} Most importantly to law schools, formative assessment can have a long-term effect on student learning.\textsuperscript{169}

One recurring argument throughout formative assessment research is that it should be used to assist students in becoming better self-regulated learners.\textsuperscript{170} The goal of formative assessment is to determine where the students are going, where they are at any moment in time, and how to close the gap between the two.\textsuperscript{171} Providing feedback as part of the formative assessment process is essential to making the most gains possible in the students’ learning.\textsuperscript{172} Feedback is most helpful when it provides information about what mistakes the student made and how the student can

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\item \textsuperscript{166} See Black & Wiliam, supra note 161, at 15–16; Fluckiger et al., supra note 136, at 136–137; Vickerman, supra note 136, 221–22, 226.
\item \textsuperscript{167} Black & Wiliam, supra note 161, at 16; Wiliam & Black, supra note 138, at 544–46.
\item \textsuperscript{168} Black & Wiliam, supra note 161, at 16. See also Paul Black & Dylan Wiliam, Inside the Black Box, PHI DELTA KAPPAN, Oct. 1998, at 139 (containing a summary of the research done by Black and Wiliam).
\item \textsuperscript{169} D. Boud, Assessment and Learning: Contradictory or Complementary?, in ASSESSMENT FOR LEARNING IN HIGHER EDUCATION, 35, 36–38 (Kogan ed., 1995).
\item \textsuperscript{170} Nicol & Macfarlane-Dick, supra note 44, at 199; Yorke, supra note 158, at 480–81.
\item \textsuperscript{171} Nicol & Macfarlane-Dick, supra note 44, at 205–06 (noting that learners who are self-regulated are more persistent, resourceful, confident, and higher achievers than those students who are not self-regulated). See also D. Royce Sadler, Formative Assessment and the Design of Instructional Systems, 18 INSTRUCTIONAL SCI. 119, 120–21 (1989) (discussing how students use formative assessment to monitor their improvement so they can assess the high-quality aspects of their learning and the weaker aspects that need to be improved); Panasuk & LeBaron, supra note 149, at 359 (finding that students who are taught with the learner-centered, formative assessment approach gain greater control over their educational experience).
\item \textsuperscript{172} Nicol & Macfarlane-Dick, supra note 44, at 205.
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correct them.\textsuperscript{173} The feedback should also focus the student on the process of learning and completing the task instead of just getting to the end product.\textsuperscript{174}

Formative assessment identifies a gap in learning, provides feedback to the student about the gap and closing the gap, involves the student in the process, and advances the students' learning.\textsuperscript{175} After reviewing most of the research done on formative assessment, learning theorists David Nicol and Debra Macfarlane-Dick also listed the principles of formative assessment that facilitate better self-regulated learning.\textsuperscript{176} Most relevant to formative assessment in law school, the researchers found that good feedback helps clarify the goals of an assignment, provides opportunities to close the gap between the students' performance and the desired learning outcomes, encourages an open dialogue between the professor and the students, and provides information to professors so they can adjust their teaching.\textsuperscript{177}

Nicol and Macfarlane-Dick emphasize that the professor must specify what good performance means.\textsuperscript{178} The professor must explicitly

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\item\textsuperscript{173} Id. at 204–05.
\item\textsuperscript{174} Id.
\item\textsuperscript{175} Margaret Heritage, \textit{Formative Assessment: What Do Teachers Need to Know and Do?}, PHI DELTA KAPPAN, Oct. 2007, at 140, 141.
\item\textsuperscript{176} Nicol & Macfarlane-Dick, supra note 44, at 205.
\item\textsuperscript{177} Id. at 205–07. \textit{See also} Chappuis & Chappuis, supra note 142, at 18; Jan Chappuis, \textit{Helping Students Understand Assessment}, EDUC. LEADERSHIP, Nov. 2005 at 39, 39–41.
\item\textsuperscript{178} Nicol & Macfarlane-Dick, supra note 44, at 206–07 (suggesting that professors must engage in good feedback practices to help students understand what is being asked of them through setting goals, criteria, and expected standards). \textit{See also} Jeffrey W. Barnes, \textit{The Functions of Assessment: A Re-examination}, 2 LEGAL EDUC. REV. 177, 181 (1991) (explaining goals to students serves as a measuring stick for the assignment's objective because it informs students in practical terms what they have to achieve); Charles A. Rees, \textit{The "Non-Assessment" Assessment Project}, 57 J. LEGAL EDUC. 521, 522 (2007) (finding that students who are given regular assessments assure that they are keeping up with classes by having professors encourage those who are succeeding or prodding those who are not); Harriet N. Katz, \textit{Evaluating the Skills Curriculum: Challenges and Opportunities for Law Schools}, 59 MERCER L. REV. 909, 933 (2008) (finding that teachers who clarify specific goals produce clear information that increases awareness of their own teaching methods); Victoria L. VanZandt, \textit{Creating Assessment Plans for Introductory Legal Research and Writing Courses}, 16 LEGAL WRITING 313, 324 (2010) (noting that goals set by teachers
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communicate the goals of the assignment by stating clear learning outcomes, and providing grading sheets, rubrics, or a list of the standards that define the different levels of achievement for the assignment. The goal is to make sure there is a match between what the student perceives as the goals of the course or assignment and what the professor perceives. Of course, no assessment is beneficial to the student without quality feedback from the professor. Simply stating that something is correct or incorrect is insufficient without providing some information on how to correct the mistake, the reason for the mistake, or a good example of what was expected. Research suggests that feedback should be given in a timely manner, detail the strengths and weaknesses of the students' work, offer suggestions for improvement, and involve praise and constructive criticism. The feedback must be related to the goals of the assignment and the criteria that are being used to evaluate or grade the assignment. It should be a statement that compares the students' actual level of work should be consistent and serve the school's mission so they can applied throughout the entire educational process).

179 VanZandt, supra note 178, at 323 (containing a discussion of learning outcomes).
180 Chappuis, supra note 177, at 40–41; Andrea A. Curcio, Moving in the Direction of Best Practices and the Carnegie Report: Reflections on Using Multiple Assessments in a Large-Section Doctrinal Course, 19 WIDENER L.J. 159, 167 (2009) (finding that when given rubrics and grading sheets, students found it easier to self-assess their own work which helped contribute to their lifelong learning process); Gregory Todd Jones et al., Does Practice Make Perfect? An Empirical Examination of the Impact of Practice Essays on Exam Performance, 35 FLA. ST. U.L. REV. 271, 288 (2008) (finding that a rubric helped students see where the majority of points were allocated so students knew where to focus their efforts).

181 Nicol & Macfarlane-Dick, supra note 44, at 206 (“[T]here must be a reasonable degree of overlap between the task goals set by the students and the goals originally set by the teacher.”).
182 Id.
183 Id.
184 Id. at 208.
185 Id. On closing the gap between the goals of the course and the abilities of the student, see Richard Higgins et al., The Conscientious Consumer: Reconsidering the Role of Assessment Feedback in Student Learning, 27 STUD. HIGHER EDUC. 53, 61 (2002); Alison Rushton, Formative Assessment: A Key to Deep Learning?, 27 MED. TEACHER. 509, 509 (2005); Panasuk & LeBaron, supra note 149, at 359; Best, supra note 149, at 16.
with what the course requires.\textsuperscript{186} Most importantly, good feedback from the professor helps students properly evaluate their work and self-correct when needed.\textsuperscript{187}

Good feedback also helps guide the instructor.\textsuperscript{188} In fact, some claim that “instruction and formative assessment are indivisible.”\textsuperscript{189} One accepted use of formative assessment by professors is to “tailor their teaching accordingly.”\textsuperscript{190} Professors can use the information taken from the formative assessment to self-reflect and self-assess their own teaching.\textsuperscript{191} Doing so requires the professor to determine if the lack of learning or mistakes made by the students could be changed by any modification of teaching, rather than accepting the students’ failure.\textsuperscript{192}

Good feedback allows for an open and thorough dialogue between the professor and the students.\textsuperscript{193} Effective feedback should be viewed by the

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\item Tarras, \textit{supra} note 140, at 468 (“[F]or assessment to be formative, it requires feedback which indicates the existence of a ‘gap’ between the actual level of work being assessed and the required standard.”).
\item Nicol & Macfarlane-Dick, \textit{supra} note 44, at 208 (“Good quality external feedback is information that helps students troubleshoot their own performance and self-correct: that is, it helps students take action to reduce the discrepancy between their intentions and the resulting effects.”).
\item Nicol & Macfarlane-Dick, \textit{supra} note 44, at 214 (explaining that assessment helps teachers generate information about students’ level of understanding so they can adapt their teaching accordingly). \textit{See also} Yorke, \textit{supra} note 158, at 482 (finding that teachers can use feedback to tailor their curriculum to move at the pace the students are learning); Black & Wiliam, \textit{supra} note 168, at 143 (discussing that teachers need assessment to see what material students find to be difficult so that they can modify and improve their learning activities).
\item Black & Wiliam, \textit{supra} note 168, at 143.
\item Yorke, \textit{supra} note 158, at 482.
\item \textit{Id.}
\item Nicol & Macfarlane-Dick, \textit{supra} note 44, at 214.
\item Black & Wiliam, \textit{supra} note 168, at 143 (“[O]pportunities for pupils to express their understanding should be designed into any piece of teaching, for this will initiate the interaction through which formative assessment aids learning.”); Nicol & Macfarlane-Dick, \textit{supra} note 44, at 210; Yorke, \textit{supra} note 158, at 487 (explaining that when a professor assigns a grade for a completed assignment, it allows the student and teacher to engage in a dialogue about how the assignment went for the student); Best, \textit{supra} note 149, at 16 (explaining that evaluation leads to a teaching-learning process where work is done by teachers and students); Panasuk & LeBaron, \textit{supra} note 149, at 359 (having an open (continued)}
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teacher as "dialogue rather than as information transmission." The feedback should also be used to continue a dialogue with the student even after it is given to the student. The professor "should try to stimulate a response and a continuing dialogue—whether... on the topics that formed the basis of the assignments or aspects of students’ performance or [on the] feedback itself." The feedback given to the student should provide an opportunity for the student to engage the professor in a discussion about the learning and the assignment, correct misunderstandings, develop a deeper understanding of the goals of the course and assignment, and provide immediate clarification and help with any difficulties. In skills-based courses, holding student conferences after giving feedback but before another assignment is due opens this dialogue. Professors can incorporate self-assessment tools into the formative assessment process along with student conferences to promote and encourage this continuous dialogue. This process provides optimal information exchange and is the best opportunity to fix any mistakes in the learning process. This is the most effective way to close the gap between the students’ current performance and the desired learning outcomes because the dialogue allows the professor and the students to get to the heart of the issues and problems with the learning process.

One of the dangers of formative assessment and significant feedback is student dependency. This occurs when the students become too dependent on the professor to complete any task. To avoid this "learned dialogue between teacher and students helps students express their needs and enhances an instructor’s ability to meet those needs)."

194 Nicol & Macfarlane-Dick, supra note 44, at 210.

195 Id.

196 Id. (quoting RICHARD FREEMAN & ROGER LEWIS, PLANNING AND IMPLEMENTING ASSESSMENT 51 (1998)). As will be discussed in the section on using self-assessment tools in class, using self-assessments before, during, and after the feedback from the professor will foster this dialogue. See infra Part V.

197 Nicol & Macfarlane-Dick, supra note 44, at 210.

198 See, e.g., id.

199 Id.

200 Id. at 210–11.

201 Id. at 213.

202 Yorke, supra note 158, at 489.
dependence," the professors must be aware that their feedback will be used to predict what they expect of the students for the assignment, but skewed by the students’ focus on how to achieve the highest grade. Some students will take this information and work toward the expectations of the professor, again focusing on the end product instead of the process of performing the task. For this reason, the form of the feedback should focus on understanding the underlying process of the students’ learning, and the dialogue between the students and the professor must work toward understanding the students’ learning, and how that learning matches the task at hand. Essentially, the professor must put a greater emphasis on assessing the metacognitive abilities of the student.

C. Effective Formative Assessment Facilitates the Development of Improved Self-Assessment and Metacognition

Good feedback must also facilitate the development of self-reflection and metacognitive skills. Because students are already engaging in some self-reflection during the learning process, the professor must know the substance of this internal feedback to better guide the process of their

\[\text{Id. ("Too often staff-driven assessment encourages students to be dependent on the teacher or examiners to make decisions about what they know and they do not effectively learn to be able to do this for themselves.") (quoting D. Boud, supra note 169, at 39).}\]

\[\text{Id.}\]

\[\text{Id.}\]

\[\text{Id. at 483.}\]


\[\text{Nicol & Macfarlane-Dick, supra note 44, at 206 (finding that by providing opportunities to practice regulating aspects of their learning through feedback, students are able to reflect on their own learning process). See also Sarah L. Ash & Patti H. Clayton, The Articulated Learning: An Approach to Guided Reflection and Assessment, 29 INNOVATIVE HIGHER EDUC. 137, 140 (2004) (finding that reflection that involves a description of the assignment, analysis, and articulation of learning outcomes helps maximize learning and reflection skills); Sheila Rodriguez, Using Feedback Theory to Help Novice Legal Writers Develop Expertise, 86 U. DET. MERCY L. REV. 207, 214 (2009) (explaining that good feedback promotes self-determination and motivation because students can see they have gained skills and capability).}\]
If students successfully complete an assignment but arrive at the end product improperly, the students are not likely to correct the learning process that led to successful completion. Without understanding the internal thinking of the students, the professor is unable to correct any process errors. For example, students may find a relevant case for an assignment using inefficient or ineffective methods. Without questioning the students on how they found the law, the professor will not be able to correct any process mistakes, and the students may not be able to find the relevant law on future assignments. One way to understand students’ thought processes is to ask process questions as part of the assignment. For example, the professor can ask the students to explain how they found the law by requesting a research log or their research trail when they use Lexis or Westlaw.

The most effective way to enhance the formative assessment process and to better understand students’ thinking is to incorporate self-assessments into the course. Integrating self-assessments into the feedback process has proven to help students identify and correct more errors than asking students to self-assess before giving feedback. Providing the students an opportunity to self-assess during and after giving feedback requires the students to internalize the professor’s feedback.

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209 See Ash & Clayton, supra note 208, at 138 (explaining that students need help connecting their reflective experiences with course material).
210 Id.
211 Id. at 142.
212 See id.
213 Id.
214 Students can print a report of their online research from Lexis or Westlaw. See, e.g., J. Fusaris, LexisNexis History and Westlaw Research Trails, U.CONN. SCH. L., http://www.law.uconn.edu/content/lexisnexis-history-and-westlaw-research-trails-0 (last visited Oct. 22, 2011). There is a link to research history on both sites. Id.
216 Nicol & Macfarlane-Dick, supra note 44, at 207. The idea that incorporating self-assessment into the formative assessment process was central to the thesis in their paper.
217 Nicol & Macfarlane-Dick, supra note 215.
Otherwise, students may look at the grade they receive or go over the comments without thinking about how to correct their mistakes going forward.\textsuperscript{218} Self-assessment surveys require students to think about the feedback, how to set future learning goals, and how to correct any future errors in the process of learning.\textsuperscript{219}

Various self-assessment tools are used in other areas of education successfully.\textsuperscript{220} Because lawyers are lifelong learners, one of the most important skills is the ability to self-assess their learning—an essential component to metacognition.\textsuperscript{221} Teaching students how to self-assess and engaging them in the self-assessment process trains them to be better lifelong learners: “As part of being lifelong learners they will be effective lifelong assessors engaging in sustainable assessment.”\textsuperscript{222} Students must be able to identify when they have met the desired outcomes and do so without becoming learning dependent on others.\textsuperscript{223} Research shows that incorporating self-assessment into the formative assessment process is ideal because it allows the students to focus keenly on the feedback and

\begin{footnotes}
\footnote{218 See Betty McDonald & David Boud, \textit{The Impact of Self-Assessment on Achievement: The Effects of Self-Assessment Training on Performance in External Examinations}, 10 \textit{ASSESSMENT EDUC.} 209, 210 (2003) (noting that a student who simply follows a teacher’s instruction with no knowledge of the purpose behind it does not eventually learn from the task).}
\footnote{219 See, \textit{e.g.}, Nicol & Macfarlane-Dick, \textit{supra} note 44, at 200 (discussing that students who are effective at self-regulation are able to interpret feedback and use it to achieve their goals).}
\footnote{220 See, \textit{e.g.}, Heidi Andrade & Anna Valtcheva, \textit{Promoting Learning and Achievement Through Self-Assessment}, 48 \textit{THEORY INTO PRACTICE} 12, 13 (2009) (finding that students internalize information provided by teachers when given a rubric or grading criteria that describes their varying level of quality in certain areas); Nicol & Macfarlane-Dick, \textit{supra} note 215 (finding that student feedback resulted in positive benefits on learning and achievement across all skill types and levels of education); McDonald & Boud, \textit{supra} note 218, at 217–19 (explaining that self-assessment helps students learn not only in a particular course but also in lifelong learning capacities, making it a skill that can be applied to any level or academic setting).}
\footnote{221 Niedwiecki, \textit{supra} note 41, at 41–42; \textit{BEST PRACTICES, supra} note 1, at 172 ("Developing lifelong learning skills may be the most important goal of legal education.").}
\footnote{222 David Boud, \textit{Sustainable Assessment: Rethinking Assessment for the Learning Society}, 22 \textit{STUD. CONTINUING EDUC.} 151, 152 (2000).}
\footnote{223 \textit{Id.}; Yorke, \textit{supra} note 158, at 489.}
\end{footnotes}
use it to improve learning.\footnote{Paul Orsmond, Stephen Merry & Arthur Callaghan, Implementation of a Formative Assessment Model Incorporating Peer and Self-Assessment, 41 Innovations Educ. & Teaching Int’l 273, 288 (2004) (explaining that feedback shifted students’ focus from merely redoing work to rethinking their work, “redirecting the use of classroom time to include . . . [more] critical thinking”).} Self-assessment activities promote more reflection on “one’s own learning, a higher standard of outcomes, responsibility for one’s own learning and increasing understanding of problem-solving” which is “enhanced when teachers give feedback” on the self-assessment.\footnote{F. Dochy, M. Segers & D. Sluijsmans, The Use of Self-, Peer and Co-Assessment in Higher Education: A Review, 24 Stud. Higher Educ. 331, 332 (1999).} For self-assessment to be the most successful in the classroom, “students need: [a]wareness of the value of self-assessment, access to clear criteria on which to base assessment, a specific task or performance to assess, direct instruction in and assistance with self-assessment, [and] practice.”\footnote{Andrade & Valtcheva, supra note 220, at 13.}

Self-assessment is a core element of metacognition because it requires the students to be aware of their knowledge of cognition, monitor their learning, and make adjustments when necessary.\footnote{See Niedwiecki, supra note 41, at 41–42 (discussing metacognition, which requires “awareness of what a person brings to the learning experience” and a process of “monitoring, evaluating, and creating pertinent learning strategies”).} Engaging the students in the self-assessment process during law school gives them the awareness of, instruction in, and practice with this skill, which is essential to lifelong learning.\footnote{See id. at 42. A goal of legal education should be to make students “expert self-regulated learners” by helping students to “control, monitor and evaluate their learning.” Id.}

V. INCORPORATING PORTFOLIOS AND SELF-ASSESSMENT TOOLS INTO SKILLS COURSES

One way to improve students’ metacognitive skills is through the formative assessment process.\footnote{See Fluckiger et al., supra note 136, at 136–37 (describing how formative assessment helps students change and enhance their own learning through feedback, which engages the student in self-assessment).} Incorporating self-assessment portfolios or some kind of self-assessment surveys throughout a course both assists
the professor in the formative assessment process and allows the students to practice this metacognitive skill.\(^{230}\)

A portfolio allows the students to reflect on their learning over the course of the semester, the main purpose of self-assessment tools.\(^{231}\) For the professor, the portfolio gives more insight into the students’ thinking and learning process.\(^{232}\) It provides a quick view of what the students think they need to improve and what they think they have already mastered.\(^{233}\) If there is some disparity between what the students believe about their learning and what the professor sees, the portfolio opens a line of communication to help understand where the difference lies.\(^{234}\) This improves the dialogue process that is essential to good formative assessment.\(^{235}\) The portfolio also allows the professor to focus on the process of the students’ learning instead of the end product.\(^{236}\)

To create a portfolio, the professor assigns a series of self-assessments to the students that are due throughout the course.\(^{237}\) Each one of the self-assessments draws upon some step in the metacognitive process such as focusing the students on their own awareness of cognition or engaging them in the process of planning, monitoring, or assessing their own learning.\(^{238}\) To move the students toward these steps, the professor should

\(^{230}\) See Niedwiecki, supra note 41, at 62–68 (discussing how professors can help students by providing assessments using technological tools, such as blogs, to help the students and the professors plan, monitor, and evaluate the student’s learning).

\(^{231}\) See Best Practices, supra note 1, at 261–63 (noting that portfolios are a unique way to give students an opportunity to reflect on their progress).

\(^{232}\) Niedwiecki, supra note 41, at 62–63.

\(^{233}\) Id.

\(^{234}\) See Nicol & Macfarlane-Dick, supra note 44, at 208 (explaining that teachers are better at recognizing “misconceptions” about a student’s achievement).

\(^{235}\) Id. at 210–11.

\(^{236}\) Nicol & Macfarlane-Dick, supra note 44, at 205.

\(^{237}\) See id. at 208 (suggesting that professors facilitate self-assessment by encouraging students to reflect on academic progress and select assignments so they can create a portfolio); John Zubizarreta, The Learning Portfolio: A Powerful Idea for Significant Learning, Idea Paper #44, The Idea Center, 2008, at 1, 3 (explaining different ways to organize a portfolio). Professors do not need to require a portfolio for the students to complete the self-assessment surveys detailed in this article.

\(^{238}\) Zubizarreta, supra note 237, at 2 (“[T]he value of portfolios in improving student learning resides in engaging students not just in collecting representative samples of their work for assessment, evaluation, or career preparation, but in addressing vital reflective (continued)
create four basic types of self-assessment tools, each of which should be given at different points in the learning process.

The first self-assessment tool should occur at the beginning of the course, where the students articulate what they bring to the class, including their past learning experiences, their own skill set, their cognitive abilities and preferences, and which skills the course requires. The self-assessment questions should engage the students in that first stage of metacognition—the knowledge of cognition. They should state their

questions that invite systematic inquiry.

In this article, the author describes multiple questions that the learner should answer during this reflective process, including:

- What have I learned? Why did I learn?
- When have I learned? In what circumstances? Under what conditions?
- How have I learned or not, and do I know what kind of learner I am?
- How does what I have learned fit into a full, continual plan for learning?
- What difference has learning made in my intellectual, personal, and ethical development?
- Where, when, and how have I engaged in integrative learning? Has my learning been connected and coherent?
- Is my learning relevant, applicable, and practical?
- When, how, and why has my learning surprised me?
- What have been the proudest highlights of my learning? The disappointments?
- In what ways has my learning been valuable?
- What difference has portfolio mentoring made in my learning? 

Id. See also Marcel V.J. Veenman et al., Metacognition and Learning: Conceptual and Methodological Considerations, 1 METACOGNITION LEARNING 3, 9 (2006). In this article, the authors discuss the three fundamental principles for successful metacognitive instruction: "[First] embedding metacognitive instruction in the content matter to ensure connectivity, [second] informing learners about the usefulness of the metacognitive activities to make them exert the initial extra effort, and [third] prolonged training to guarantee the smooth and maintained application of metacognitive activity." Id.

239 See FREEMAN & LEWIS, supra note 196, at 123.

240 See Niedwiecki, supra note 41, at 49–54. By engaging the students in the process of thinking about what they bring to the learning experience, the professor is engaging them in the knowledge of cognition phase of metacognition. Id. This requires them to actively think about their past experiences and how those will impact their learning in the course. Id. at 57. This metacognitive skill is essential to the learning process. Id. See also Veenman et al., supra note 238, at 5 ("Metacognitive skills... have a feedback mechanism built-in. Either you are capable of planning your actions ahead and task performance progresses smoothly, or you [do not] and your actions go astray.").
expectations for the course, what they hope to learn in the course, and what previous experience they have with the material being taught in the course.\textsuperscript{241} The students should also list the goals for their learning, which helps them begin the metacognitive skill of planning.\textsuperscript{242} The self-assessment should be directed to the specific skills being taught in the course, so specific self-assessment forms will differ based on the content of the course.\textsuperscript{243} The preliminary self-assessment should ask the following:\textsuperscript{244}

- What does the phrase “lawyering skills” mean to you?
- What is your greatest strength as a writer?
- What is your greatest challenge as a writer?
- What would you like to get out of this class?
- Discuss your research experience (including undergraduate or other course work).\textsuperscript{245}

These questions should be tailored to the content of the course.\textsuperscript{246} Incorporating some of the skills into the questions ensures that the students understand the cognitive skills that will be developed in the course.\textsuperscript{247} The questions listed above are designed for a first year legal writing course, so they focus on students’ previous experience with writing and research. The answers to these questions allow the professor to determine if there are any skills that need to be adjusted to match the needs of law school or law practice. For example, some students may have never opened a reference book in a library or may have only used Google or other search engines to do research. The preliminary self-assessment will help make the students and the professor aware of the differences in research between undergraduate education and law school. It also helps the students practice

\textsuperscript{241} See Niedwiecki, supra note 41, at 57, 62, 70–71.
\textsuperscript{242} Schraw, supra note 42, at 115; Fox & Riconscente, supra note 40, at 376.
\textsuperscript{243} See Niedwiecki, supra note 41, at 62–68.
\textsuperscript{244} These assessment questions were based on a lawyering skills course for first year students. The questions were based on which skills were being tested in the course (i.e., legal research and writing).
\textsuperscript{245} Niedwiecki, supra note 41, at 48–49, 57, 70–71.
\textsuperscript{246} See Niedwiecki, supra note 41, at 62–68. A professor may want to do a more extensive survey with more detailed questions. A more detailed survey can be used for two purposes—to engage the students in the first step of metacognition and to learn more about the abilities and experiences of the students. See Niedwiecki, supra note 41, at 70–71 (containing a detailed survey).
\textsuperscript{247} Id. at 49.
control of their cognition by making them aware of what they bring to law school and what law school requires.

The second type of self-assessment tool requires the students to assess an assignment that they just completed.\textsuperscript{248} It should be given to the students immediately after they submit the assignment to the professor, while they are still thinking about the work they just completed.\textsuperscript{249} The assessment should ask the students to identify the strengths and weaknesses of their work, allow the students to ask any questions about the assignment, and evaluate whether the students met the assignment's goals.\textsuperscript{250} Typical assessment items include:

- List at least three skills you thought this assignment tested.
- What do you think was the most difficult part of this assignment?
- Which skill do you think you mastered the most?
- List three areas where you think you need to improve.
- If you could ask the professor three questions about the assignment, what would they be? You must ask three questions.
- What grade do you expect to get on this assignment (A to F)? Explain why.

Because this assessment is done immediately after the assignments are submitted, the students have a clearer idea of where they struggled and where they were most comfortable in the assignment.\textsuperscript{251} It also allows students to ask any questions that were not answered earlier in the course.\textsuperscript{252} It begins a dialogue between the professor and the students regarding the skills in the class, one of the key principles to effective formative assessment.\textsuperscript{253} It also serves two pedagogical goals: to engage the students in self-regulation and metacognition, and to improve the formative assessment process by starting the conversation about the strengths and weaknesses in the paper.\textsuperscript{254} By knowing what the students perceive as their strengths and weaknesses, the professor can help improve the students' control of their cognition.\textsuperscript{255} For example, if students believe

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\item \textsuperscript{248} Freeman & Lewis, supra note 196, at 32.
\item \textsuperscript{249} Id. at 49.
\item \textsuperscript{250} Chappuis, supra note 177.
\item \textsuperscript{251} Freeman & Lewis, supra note 196, at 49.
\item \textsuperscript{252} See, e.g., Nicol & Macfarlane-Dick, supra note 44, at 210.
\item \textsuperscript{253} Id.
\item \textsuperscript{254} See Kristina L. Niedringhaus, Teaching Better Research Skills by Teaching Metacognitive Ability, 18 Persp.: Teaching Legal Res. & Writing 113, 115 (2010).
\item \textsuperscript{255} Id. at 116.
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that they have a strength that the professor believes is a weakness, the professor knows where to start the dialogue. It allows the professor to ask subsequent questions that get at the process of how the students learn and lets the professor correct any process or learning errors.

The third type of self-assessment tool is a post-critique assessment, given to the students when their critiqued papers are returned. Post-critique assessment questions primarily ask students to interpret and analyze the professor’s comments. The assessment is divided into two parts—questions that are answered after re-reading their non-critiqued papers and questions that are answered after thoroughly reading the critiqued paper. The goal of the first set of questions is to see how the students view their papers after a week or two. Because these assessments are completed several days after the papers are submitted, the students may have a more objective view of their work. It also allows them to critique their papers right before they see the professor’s feedback, preparing them for the feedback they are about to receive. Once the critiqued papers are returned, the students are immediately required to see if their assessment correlates with the professor’s feedback, which is another level of self-assessment. If the assessment between the students and the professor differs, the students will have to think deeply to determine why the disparity exists. This gives the students and the professor another point to open a dialogue about this disconnect. This tool enhances the formative assessment process because it requires the students to engage in self-assessment, opens a dialogue with the professor,

256 See Nicol & Macfarlane-Dick, supra note 44, at 207–10.
257 See Garfield, supra note 135.
258 Id.
259 Id.
260 Id.
261 Id.
262 Mark Wilson & Kathleen Scalise, Assessment to Improve Learning in Higher Education: The BEAR Assessment System, 52 HIGHER EDUC. 635, 637 (2006) (explaining that students are able to regulate their own learning when they understand how they are going to be graded, where they are likely to fall within those measures, and how they can improve); Niedringhaus, supra note 254, 113–14 (explaining that teachers need to know how to plan their syllabus in a way that enables students to plan a strategy, but it is the students’ job to continuously reevaluate their progress to meet up to a teacher’s expectation).
263 Nicol & Macfarlane-Dick, supra note 44, at 210.
and allows the students and the professor to work on the process of learning instead of the ultimate end product.\textsuperscript{264} The remaining questions in a post-critique assessment require students to internalize the feedback and to set future goals for learning, all metacognitive strategies.\textsuperscript{265} Instead of just viewing the grade and making their own judgments about what happened, the students must thoroughly analyze the comments.\textsuperscript{266} Typical post critique assessment items include:

- After re-reading your paper, list the three most significant mistakes you made (asked before the critique is given).
- After re-reading your paper, list the three strongest parts of your paper (asked before the critique is given).
- After reading the critique of your paper, what do you now consider to be the three most important areas that need improvement?
- What steps will take you to address these areas that need improvement?
- After reading the critique of your paper, what do you consider to be the single strongest part of your paper? Why?
- What do you want to ask the professor about the critique of your paper or about writing in general?
- List the writing and grammar mistakes that you need to address. Discuss what you are doing to correct these mistakes. Be specific.

The post-critique assessment is another step in the monitoring and evaluating process of metacognition,\textsuperscript{267} something that is often left out of the learning process for novice learners.\textsuperscript{268} Requiring the students to set goals begins the entire metacognitive process over again for the next assignment and future learning.\textsuperscript{269} It also requires that students see the gap between their current learning and the requirements of future tasks and

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\textsuperscript{264} Id. at 210–11.
\textsuperscript{265} See id. at 208.
\textsuperscript{266} Id. at 208–10.
\textsuperscript{267} Niedringhaus, supra note 254, at 116.
\textsuperscript{268} Nicol & Macfarlane-Dick, supra note 44, at 200.
\textsuperscript{269} Daniel Dinsmore et al., \textit{Focusing the Conceptual Lens on Metacognition, Self-Regulation, and Self-Regulated Learning}, 20 \textit{EDUC. PSYCHOL REV.} 391, 393 (2008) (explaining that metacognition emphasizes learner development over learner-environment interaction by checking the outcome, planning, and revising strategies of the individual student); Niedringhaus, supra note 254, at 113 (explaining that metacognition means that students know their learning preferences, strengths, weaknesses, the knowledge that must be gained, and the best way to gain that knowledge).
ensures that they develop strategies to close those gaps.\textsuperscript{270} The ultimate goal is to engage the students in the exact metacognitive process that they will employ when they are learning as lawyers and when they do not have the help of a professor.\textsuperscript{271} These surveys allow the students to practice self-assessment and to develop the metacognitive skills required of a lawyer.\textsuperscript{272}

Post-critique assessments should be required after every assignment.\textsuperscript{273} By doing so, the students will begin to engage in this process automatically, a trait of expert learners.\textsuperscript{274} Constantly requiring students to set goals, determine gaps in learning, monitor the progress of learning and make appropriate adjustments, and evaluate when the task is done leads to a greater chance that they will continue to perform these steps when they practice law.\textsuperscript{275} The employment lawyer discussed earlier would have used these exact metacognitive skills to complete the project.

Using portfolios enhances the learning experience for the students and the professor as well.\textsuperscript{276} Placing the assignments in a portfolio helps the students and the professors see the progression of learning and whether errors are being repeated.\textsuperscript{277} This gives the students and the professor another opportunity to address the process mistakes and to adjust the student's learning.\textsuperscript{278}

\textsuperscript{270} Nicol & Macfarlane-Dick, \textit{supra} note 44, at 213.
\textsuperscript{271} See \textit{BEST PRACTICES}, \textit{supra} note 1, at 172 ("Developing lifelong learning skills may be the most important goal of legal education.").
\textsuperscript{272} Niedringhaus, \textit{supra} note 254, at 117–18.
\textsuperscript{273} Ertmer & Newby, \textit{supra} note 31, at 19, 21.
\textsuperscript{274} \textit{Id.} at 1, 21; Victoria Chan, \textit{Learning Autonomously: The Learners' Perspectives}, 25 \textit{J. FURTHER & HIGHER EDUC.} 287, 289 (2001); Heikkila & Lonka, \textit{supra} note 45, at 109, 112.
\textsuperscript{275} See Ertmer & Newby, \textit{supra} note 31, at 1.
\textsuperscript{276} Susan R. Dailey, \textit{Integrating Theory and Practice Through Teacher Portfolios}, 4 \textit{LEGAL WRITING} 149, 150 (1998) (finding that teachers who use portfolios for their own work are more likely to create a curriculum that enables a creative and reflective learning environment for students); Deborah Jones Merritt, \textit{Pedagogy, Progress, and Portfolios}, 25 \textit{OHIO ST. J. ON DISP. RESOL.} 7, 9 (2010) (explaining that a good portfolio is a valuable learning process because it helps students map, display, and assess their achievements).
\textsuperscript{277} \textit{Id.}
\textsuperscript{278} See Zubizarreta, \textit{supra} note 237, at 2 (noting that students can use their portfolios to analyze their learning and their shortcomings).
Each of these assessment tools should be used in conjunction with student conferences and meetings. A quick review of the portfolio before a meeting with students will give the professor more knowledge of the student’s learning than without the assessments. The professor will be able to quickly determine where there are gaps in what the students know and where they should be. A look at the portfolio also helps determine the inconsistencies between the student’s self-evaluation and the professor’s feedback. The professor can then ask more pointed questions about the inconsistencies and can help the students make appropriate adjustments during their conferences. The questions could focus on the process of learning or accomplishing the task: Why did you use that book? Why did you choose that word? Why did you make this decision? If, for example, students believe that their strength is how they organized the factual application section in an office memorandum, but the professor saw great gaps in reasoning, a discussion about why the students thought the application section was done well should ensue. This should produce much more information about exactly where the students are making the process error. As a result, these assessments make the meetings more efficient and helpful to the students because the professor and the students have already identified the issues and have begun thinking about strategies to address them.

The final type of self-assessment tool is at the end of the course. This assessment is used to evaluate the learning for the entire course and set goals for future learning. The end of the course self-assessment questions focus on the student’s growth, areas of concern, and areas of improvement. The students should also review all of their previous self-assessment forms and determine if they met their goals and expectations. The end of the course self-assessment also requires the students to determine which skills they need to develop further. Typical questions that appear on this final self-assessment include:

- Which skill improved the most during this course?
- In future classes, which skills will require further development?
- What are your strengths now?
- What are the next steps you will take to improve your writing?

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279 See Nicol & Macfarlane-Dick, supra note 44, at 213 (“External feedback provides an opportunity to close a gap between current performance and the performance expected by the teacher.”).

280 Id.

281 Id.
Most of these self-assessment surveys can be repeated throughout the semester, and each can be tailored to the specific assignment. The legal writing portfolio also gives the students an accessible, organized measuring tool that they can use to track the development of their writing skills. In fact, most students should be encouraged by their drastic improvements over the course of the semester.

VI. CONCLUSION

With the current movement to increase teaching practical skills to law students, one of the most important skills necessary for students is the ability to learn new information. Unfortunately, law professors tend to focus too much on assessing a final product instead of focusing on how the students got to that end product. Law schools could improve their students' learning by implementing strategies to assess that learning. Law schools can do this by critiquing students and providing them feedback through more effective formative assessment methods. Instituting self-assessment surveys and portfolios can help the students improve their metacognitive skills while providing the professor with more information to assess their students' learning. By providing their students with more explicit training in metacognition, and by using more effective formative assessment techniques, the professor will improve the lifelong learning skills of law students and make them expert learners, which should be the main focus of a legal education.

282 See Niedwiecki, supra note 41, at 62–68.
283 Merritt, supra note 276, at 1.