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Teaching for Lifelong Learning: Improving the Metacognitive Skills of Students through More Effective Formative Assessment Techniques

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Teaching for Lifelong Learning: Improving the Metacognitive Skills of Law Students through More Effective Formative Assessment Techniques

By Anthony Niedwiecki*

With the widespread criticisms of legal education¹ and the proposed changes to the ABA accreditation standards², law schools are looking for ways that they can better teach students to be lawyers.³ In fact, law schools may be facing a perfect storm for significant changes in legal education with two high-profile reports criticizing legal education⁴, a major restructuring of

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¹ The most important reviews of legal education were issued in 2007. See WILLIAM M. SULLIVAN, ET. AL. EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW (Jossey-Bass 2007)(also known as the “Carnegie Report”); ROY STUCKEY, ET. AL. B BEST PRACTICES FOR LEGAL EDUCATION (Clinical Legal Education Association 2007). In addition to these high-profile reports, there has been a great deal of discussion about the high cost of legal education in a declining job market for lawyers. See David Segal, Is Law School a Losing Game?, NY TIMES, January 8, 2011 at BU1.

² The American Bar Association, the main entity that accredits law schools, is proposing changes to the law standards in Chapter 3, Program of Legal Education, to focus on learning outcomes and assessment. The most recent version of the proposed ABA standards was released in July 2011. See American Bar Association Section of Legal Education and Admission to the Bar Standards Review Committee Draft on Student Learning Outcomes for July 9-10, 2011 Meeting which can be found at http://www.abanet.org/legaled/committees/comstandards.html.

³ See e.g. Assessment, 24 Second Draft 1-19 (Legal Writing Institute Fall 2010); Tonya Kowalski, True North: Navigating for the Transfer of Learning in Legal Education, 2010 Seattle L. Rev. 51 (2010) (suggesting that students can benefit from seeing the kinds of transferrable knowledge and active learning skills that are emphasized in the transfer method of learning); Judith Welch Wegner, Reframing Legal Education’s "Wicked Problems", 61 Rutgers Law Review 867 (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); Roy Stuckey, Best Practices’ or Not, it is Time to Re-Think Legal Education, 16 Clinical Law Review 301 (2009) (stating that the traditional case-method technique should continue to be used, but adding that clinical legal education’s emphasis should be greatly increased, along with “simulation-based courses” such as “interviewing,” “counseling,” and “trial practice.”); Ira P. Robbins, Best Practices on ‘Best Practices’: Legal Education and Beyond, 16 Clinical Law Review 69 (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).

⁴ See SULLIVAN ET AL, supra note 1, and STUCKEY ET AL, supra note 1.
law firms and practice because of the weakening economy

5, and the push to change the American Bar Association’s accreditation standards.6

In 2007, two major reports were issued that both criticized legal education and offered a series of recommendations on better preparing students for the practice of law. In Educating Lawyers, 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.7 The report criticizes legal education for not teaching enough practical skills and for failing to fully integrate the learning of analysis with ethical and professional training.8 At the same time as the Carnegie Report was published, The Clinical Legal Education Association issued its own set of recommendations. The report, Best Practices in Legal Education, also criticized legal education for not establishing appropriate learning outcomes and using effective assessment models to make law students better prepared for the practice of law.9 Its report made a series of recommendation on how to plan a curriculum, establish broad learning objectives for the school,

5 See e.g. Segal, supra note 1.
6 See supra note 2.
7 SULLIVAN ET AL, 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. Although law schools tend to teach analytical skills well, the teaching of it is disconnected with the real life experience of working with clients and developing a professional identity.
9 STUCKEY ET AL, supra note 1.
develop specific learning objectives for each type of course, assess those learning outcomes, and best teach students for the practice of law.\textsuperscript{10}

Over the past few years, the American Bar Association has also begun a full study of transforming its own accreditation standards by focusing on learning outcomes and assessment instead of the input measures it has traditionally used.\textsuperscript{11} All of this has happened during one of the worst periods for law firms and the poor economy.\textsuperscript{12}

These reports and events have highlighted the need to prepare law students to be practice-ready and help make them better prepared for lifelong learning\textsuperscript{13}, 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 our students to be expert learners even though lawyers will be constantly learning while practicing law. In light of law school's general failure to teach students to be expert learners, this Article will discuss 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.\textsuperscript{14} Specifically, this Article

\begin{footnotes}
\item[10] \textit{Id.}
\item[11] Generally, the ABA has set its standards on input measures. 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 \textit{2010-2011 Standards and Rules of Procedure for Approval of Law Schools} found at \url{http://www.abanet.org/legaled/standards/standards.html}. 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 \textit{supra} note 2.
\item[12] See Segal, \textit{supra} note 1.
\item[13] \textit{SULLIVAN ET. AL, supra} note 1., at 87-95; Stuckey Et Al, \textit{supra} note 1, at 1-5.
\item[14] 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 are taught. Examples of doctrinal courses are contracts, torts, civil procedure, etc. Skills courses are those that focus on teaching some particular lawyering
\end{footnotes}
will focus 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 law teaching away from a focus on an end-product—a memorandum, motion, negotiation, oral argument, etc.—to the underlying process of developing these products.

Part I of this Article will focus on the need to prepare law students to be expert learners because they will be constant learners in the practice of law. Part II will detail the concept of metacognition and its role in preparing students to be self-regulated learners. It will discuss the components of metacognition, its role in law school, and the current push to include better metacognitive training in law school. Part III will detail how formative assessment can be better utilized in improving the metacognitive skills of students. Specifically, it will detail 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 IV explains how to use self-assessment surveys and portfolios to enhance the formative assessment process and help students become better self-regulated learners.

I. Moving Law Students From Novice to Expert Learners

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skill. Examples of skills courses are legal research and writing, negotiation, contract drafting, clinics, and externships.
For several decades, legal educators have debated the appropriate mix of substance, skills, and ethics in the law school curriculum.\textsuperscript{15} The current criticisms of legal education and the proposed ABA accreditation standards are continuing this debate and forcing 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.”\textsuperscript{16} To make law students practice-ready, most legal educators would agree that graduates will need to leave law school with some minimal competencies, including critical thinking, problem solving, legal analysis, legal research, writing, and communication.\textsuperscript{17} Somewhat unique to law school is that the students come from a wide range of learning experiences and educational backgrounds before coming to law


\textsuperscript{16} Proposed ABA Accreditation Standards from July 2011 Meeting of the Standards Review Committee, Interpretation 302-4, found at http://www.americanbar.org/groups/legal_education/committees/standards_review.html

\textsuperscript{17} Id.; MacCrate Report, supra note 15. The MacCrate Report recommended 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. Id.
school,¹⁸ with most having little or no experience or skills in the necessary competencies to succeed in law school and the profession.

One of the biggest components often missed in the discussion about how to teach law students is the best way to train our 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 new and 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 continue to face. This requires that law schools move the students from being novice learners to expert learners.¹⁹

No matter the area of law, lawyers will need to learn new material on a daily basis, whether it is a new area of the law or 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 more efficiently and thoroughly will be able to handle the constant learning required of

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¹⁸ The American Bar Association does not recommend a particular undergraduate major for law students, saying that “[s]tudents are admitted to law school from almost every academic discipline.” See Preparing for Law School at http://www.americanbar.org/groups/legal_education/resources/pre_law.html

¹⁹ Expert learners are those that are able to learn successfully and efficiently. They are not those with domain specific knowledge, but are capable of learning and completing new tasks more successfully than those that are novice learners. See Tamana Van Gog, K. Anders Ericsson, Remy M. J. P. Rikers & Fred Paas. Instructional Design for Advanced Learners: Establishing Connections Between the Theoretical Frameworks of Cognitive Load and Deliberative Practice, 53 Education Technology Research & Development 73 (2005)(discussing the research on how expert learners think and process information, focusing on the amount of effort they put into their performance rather than the amount of knowledge they obtain in a particular domain).
lawyers, and learning theorists describe these individuals as expert learners.\textsuperscript{20}

Examining a typical problem an employment lawyer may encounter illustrates how the practice of law requires constant learning, including subjects that are in and out of law:\textsuperscript{21}

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

The associate has only two days to learn a wide variety of information and knowledge, including some of the following:

- The science and engineering associated with the product and company.
- Any state or federal laws that are triggered.
- The contract principles that might guide the legal action.
- Any procedural issues associate with temporary injunctions or restraining orders, permanent injunctions, and ex-parte communications with the court.
- How to apply the underlying standard for injunctions to torts, covenants not compete, breach of contract, trade secrets, etc.).
- The structure and function of the respective companies.

An expert learner will be able to handle these questions and this situation much more effectively than a novice learner, especially given the short amount of time to develop and draft the appropriate legal documents.

\textsuperscript{20} Peggy Ertmer & Timothy Newby, \textit{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).

\textsuperscript{21} This is loosely based on \textit{Advanced Cable Ties, Inc. v. Hewes}, 21 Mass.L.Rptr. 596 (2006).
To help law students become expert learners, law schools need to do more to adapt their teaching so the students are able to adapt to situations like this employment law problem.

An expert learner is defined as “those successful individuals who approach academic tasks with confidence, diligence, and resourcefulness.” 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.” For lawyers and law students, being an expert learner requires that they know what they bring to the table, what they are lacking in knowledge, what they will need to learn, how to obtain that knowledge, how to apply that knowledge, how to know that they are getting the right information, and how to know when they are failing or succeeding in getting the knowledge. These are all metacognitive skills.

II. Metacognition and Self-Regulated Learning

Some of the most important skills law schools can teach students to make them better lifelong learners are metacognitive strategies.

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22 Ertmer & Newby, supra note 20, at 1 (emphasizing that expert learners are self-directed, goal oriented and use knowledge in conjunction with effective cognitive strategies to enhance their opportunities to learn a wide array of information).

23 Id.

24 For a detailed discussion on Metacognition, see notes 25 and 49 infra with the accompanying text.

25 See STUCKEY ET AL, supra note 1, at 172 (“developing lifelong learning skills may be the most important goal of legal education”).
Essentially, metacognition is defined as being able to regulate and control one’s learning.\textsuperscript{26} Put simply, it is the process of “thinking about thinking”\textsuperscript{27} and the ability to self-regulate one’s learning with the goal of transferring learned skills to new situations.\textsuperscript{28} There are many metacognitive skills that everyone employs in their 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


\textsuperscript{27} Fox & Riconscente, supra note 26 at 375.

\textsuperscript{28} For a more thorough discussion on metacognition in law school, see Anthony Niedwiecki, \textit{Lawyers and Learning: A Metacognitive Approach to Legal Education}, 13 Widener L. Rev. 33, 42-43 (2006).
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.\textsuperscript{29} Consequently, those law students who come to school and are immediately successful are often the ones who have developed good metacognitive abilities through their previous learning experiences.

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 situation, when they don’t understand what they are reading or learning, and how to evaluate their learning.\textsuperscript{30} It is this internal reflection and conscious control of the learning process that goes to the heart of metacognition.\textsuperscript{31}

To fully understand what constitutes a metacognitive skill, it needs to be differentiated with cognitive skills. Cognitive skills are those that are needed to perform a specific task, while “metacognitive skills involve an


\textsuperscript{30} See e.g., Fox & Riconscente, \textit{supra} note 26 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{31} \textit{Id.}
understanding of how that task is performed.”32 While cognitive skills are more 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.”33 After learning a cognitive skill, it can become an automatic process, where metacognition requires a more deliberate process and more active participation by the learner. For a law student, a cognitive skill would be the ability to find the law, understand the law, and apply the law. Cognitive skills are what law professors generally teach students in law school, whether it is legal analysis in a doctrinal class or the drafting of a legal document in a skills course.34 For example, students eventually become skilled at using IRAC to organize their writing, which is a cognitive skill. Determining when to modify the IRAC structure would be considered a metacognitive skill, which requires a much more complex and deliberate thought process.35 Here are some examples of cognitive skills and the corresponding metacognitive skill:

<table>
<thead>
<tr>
<th>Cognitive Skill</th>
<th>Metacognitive Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding a case using Lexis</td>
<td>Determining when your research is finished</td>
</tr>
</tbody>
</table>

33 Niedwiecki, supra note 28, at 43.
35 Niedwiecki, supra note 28, at 42-43.
The problem is that 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 they have the ability to transfer these skills and knowledge. As a result, our students focus more on surviving law school– to survive the class, exam, or law school in general. Many of the current assessment practices in law school also encourage the students to only focus on the end-product. For example, many classes only provide 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 to correct process to get there.

In looking at the employment problem above, successful law teaching would have trained the law student to look at this learning situation and know what needs to be learned, what is already known, where to locate the

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36 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. Leah M. Christensen, Enhancing Law School Success: A study of Goal Orientations, Academic Achievement, and the Declining Self-Efficacy of Our Law Students, 33 Law & Psychol. Rev. 57 (2009) (noting that law students are “performance oriented learners” who are led to believe that success is measured by high grades and academic honors rather than comprehension).
relevant information, and how much time it will take. Those with strong metacognitive skills will be better at these steps in the learning process and determining the appropriate legal action and documents that will need to be filed with the court, so law teaching 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.

37 These are all metacognitive strategies.
38 Schraw, supra note 32, at 114-115. Some learning theorists further define metacognition to include declarative, procedural, and conditional knowledge. See Niedwiecki, supra note 28, at 43 & n.44.
39 Schraw, supra note 32, at 114; Niedwiecki, supra note 28, at 44.
40 Schraw, supra note 32, at 117. For a discussion on the many issues related to adult learners, see e.g. Phil Askham, Context and Identity: Exploring Adult Learners’ Experiences of Higher Education, 32 Journal of Further and Higher Education 85 (2008) (discussing how part-time, work-based, adult learners deal with the stigma of higher education for the first time); John F. Check, Teaching Learning Preferences of the Adult Learner, Project Innovation 107 (2001) (noting that 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); Oring Gom, Motivation and Adult Learning, 10 Contemporary PNG Studies: DWU Research Journal 17 (2009); Helen Plant, What About the Learners?, Oct. Adults Learning 21 (2005) (discussing that central lifelong learning themes such as employability, progression, the creation of a lifelong learning workforce, and the development of regional needs have a clear resonance with the broader national agenda); Andrea Honigsfeld & Rita Dunn, Learning-Style Characteristics of Adult Learners, The Delta Kappa Gamma Bulletin 14 (2006) (emphasizing that no two adult learners approach the same task with identical strategies, some are visual, tactual, auditory or kinesthetic learners who become bored, frustrated, overwhelmed or unable to cope with the challenges of higher
Generally, adult learners tend to share some common characteristics. First, they tend to be more motivated and focused on achieving a goal in a learning experience.\textsuperscript{41} Second, they bring previous experiences that may help or hinder their learning in law school.\textsuperscript{42} These experiences may be academic or work-related, where the student developed learning habits that were successful for previous learning tasks but won’t be successful in law school. For example, if a student did well on exams in undergraduate school by only studying the night before taking the exam, he may incorrectly believe that he will be able to do the same in law school. In fact, a recent study by professors at Wake Forest Law School showed that most students come to law school over-stating some of their abilities.\textsuperscript{43}

\textsuperscript{41} See Gom, supra note 40, at 19(“As people mature their readiness to learn becomes oriented increasingly to the developmental tasks of their social roles...[and their] motivation to learn is internal”); Ross-Gordon, supra note __ at 48 (reviewing several studies on adult learners and finding that they are “goal oriented, responsible, and self-directed”).

\textsuperscript{42} John F. Check, Teaching Learning Preferences of the Adult Learner, Project Innovation 107, 111 (2001)(stating that adult learners enter “class with a large accumulation of experiences”); Gom, supra note 40, at 19 (quoting Malcolm Knowles, the founder of the concept of adult learning theory: “As people mature they accumulate a growing reservoir of experience that becomes an increasing resource for learning”).

\textsuperscript{43} 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, available on SSRN at http://ssrn.com/abstract=1845024. The study surveyed incoming law students in 2007 and 2009 about their experiences and expectations as they entered law school. 70% of the respondents in the
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 previously have done another covenant not to compete problem, but it dealt with a different type of job. He could draw upon his previous experience to have a basic idea of the law and what additional research he will need to do. He may determine that he can use his previous documents as a starting point, but know that some sections will need to be re-developed based on the employee’s new and old job. Once the learner has consciously begun to match his knowledge and skills with the new task, he then moves to the next step in the learning process—the regulation of his learning.

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.44 Once the learner is done evaluating the final outcome of the task, the learner then starts the process over on the next task, incorporating the learning that took place on the previous task when examining his more

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44 Schraw, supra note 32, at 115 (describing activities such as planning how to approach a given learning task, monitoring comprehension, and evaluating progress toward the completion of a task are metacognitive functions).
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.

In regulating cognition, the planning stage involves matching the skills that the learner brings to the task with the cognitive skills required of the task. This requires that the learners 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 a task will take. Learners will likely question their goals, determine their strategies, decide which useful skills to employ, and decide which work conditions will allow them to accomplish the task.

The monitoring stage requires that the learners follow the learning plan and evaluate whether the strategies are working. It also involves modifying the strategies if they are not working. A good example of monitoring occurs whenever learners read material they did not understand. They may determine that a paragraph in a case did not make sense, so they

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45 Id. (noting that 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, SULLIVAN ET AL, supra note 1, at 109 (noting that central to this knowledge of self and self-regulation are commitment, attitudes, and attention all which must be reflected upon when evaluating the final outcome of the task).
46 Schraw, supra note 32, at 115.
47 Ertmer & Newby, supra note 20, at 20; Schraw, supra note 32, at 115.
re-read the paragraph, look unfamiliar terms in a dictionary, or re-read previous sections to get a better context of the paragraph. During the monitoring phase, the learners are likely asking themselves if they understand the material, when they will likely reach the end of their task, and whether they should add any outside materials to better understand the task.\textsuperscript{48}

The final stage of the regulation of cognition involves evaluating the learning task. Learners will determine whether the plan resulted in successful learning, they were able to avoid or manage any obstacles, and they met the goals established in the planning phase. In this final stage, learners are likely evaluating whether the approach or strategies worked, when they can use that approach again, and what new goals they have going forward. This information gleaned during the evaluating stage will be used to help plan future learning and cognitive tasks. An example of evaluating would be to see if the time set aside to the task was enough to complete it and whether more or less time will be required when a similar task is required in the future.\textsuperscript{49}

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

\textsuperscript{48} Ertmer & Newby, \textit{supra} note 20, at 20; Schraw, supra note 32, at 115.
\textsuperscript{49} Ertmer & Newby, \textit{supra} note 20 at 20; Schraw, supra note 32 at 115.
fully know that they are teaching metacognitive skills, many techniques they employ in the classroom enhance their students’ metacognitive abilities.\(^{50}\) For example, using the case method to continual ask students how they got to the answer or to adjust a hypothetical to get the student to understand the nuance to a rule will require the student to engage in metacognition by examining the thought process of the student. Simply asking a student a question without further asking how the student got to that answer will not provide the insight into the student’s metacognitive abilities. The current problem with the use of the Socratic method, however, is that it teaches metacognition implicitly\(^{51}\) and is only likely to help the 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 are more likely to teach metacognitive strategies more explicitly by trying to focus on process as well as the end-product. In fact, the Carnegie Report recognized the difference between teaching a doctrinal law class and a skills-based course and its effect on improving metacognitive learning. In a writing course, for example,

\(^{50}\) Orin S. Kerr, The Decline of the Socratic Method at Harvard, 78 Neb. L. Rev. 113 (1999) (discussing that proponents of the Socratic Method extol its capacity to teach sophisticated legal reasoning effectively to a large class of students because students 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); 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).

\(^{51}\) See Niedwiecki, supra note 28, at 34-35.
“students are not told to simply figure things out for themselves” when they are required to learn in context—having to express their learning in writing and through solving a problem.\(^5\) By learning in context, the student goes through several stages of learning, including receiving feedback and practicing the activity. The last step of the learning process, the *Carnegie Report* concludes, 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 in order 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.\(^6\)

Because all learning impacts future learning, it is imperative that law school and law professors evaluate the learning process of the students so that the impact on future learning is positive and does not perpetuate mistakes the students make while learning a cognitive skill.

The new emphasis in legal education is further developed in other sections of the *Carnegie Report* and *Educating Lawyers*, which consistently emphasize the importance of incorporating metacognitive training into the law school curriculum. CLEA’s recommendations in *Educating Lawyers* includes a couple of recommendations that go to improving metacognitive instruction and training. One recommendation is designed to “help students

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\(^5\) [SULLIVAN ET AL, supra note 1, at 109.](#)

\(^6\) *Id.* at 110.
improve their self-directed learning skills,” and essential component of metacognition. In explaining this recommendation, the authors describe the metacognitive process:

It involves a cyclical process in which self-directed learners appropriately classify the demands of a learning 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 emphasized the need to make our students better self-regulated learners and improving our teaching of metacognitive skills by stating:

[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 American Bar Association 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 American Bar Association Section of Legal Education and Admissions to the Bar Standards Review Committee,

54 STUCKEY ET AL, supra note 1, at 127.
55 Id. at 127, citing to MICHAEL HUNTER SCHWARTZ, EXPERT LEARNING FOR LAW STUDENTS (2005).
56 SULLIVAN ET AL, supra note 1, at 173.
57 Because lawyers are constant learners, they repeatedly monitor and self-assess their learning while practicing law to make sure they are completing a particular assignment or project.
Student Learning Outcomes Subcommittee referenced self-reflective learning and self-assessment throughout the recommendations, including the following:

- **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 his or her performance, professionalism and level of competence.”

Although legal education is beginning to recognize the need for training our 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 the learning

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59 John M. A. DiPippa, Martha M. Peters, *The Lawyering Process: An Example of Metacognition at its Best*, 10 Clinical L. Rev. 311 (2003) (challenging teachers and readers to become aware of their own thinking and as the learning theory has since revealed, including the personal variables, task variables, and strategies); See Also, Tonya Kowalski, *True North: Navigating for the Transfer of Learning in Legal Education*, 34 Seattle L. Rev. 51 (2010) (discussing 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.)

60 Jerome Frank, *A Plea for Lawyer Schools*, 56 Yale L.J. 1302 (1947) (criticizing legal education based on the case method for its lack of practical application); See Also Christensen, supra note 36.
process of the students 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 the process of the students’ learning will help keep students from repeating mistakes on future assignments in law school and the practice of law.

III. Teaching Process Instead of Product Through Effective Formative Assessment Techniques

Most law school classes work students toward an end-product. In a purely doctrinal class, the students work toward a final exam. In a skills-based course, the students work toward a final project like an office memorandum, a motion or appellate brief, negotiation, or trial. In each of these types of courses, students tend to focus on producing a product and working toward a goal. Additionally, law schools and current ABA accreditation standards emphasize passing the bar exam, the ultimate end-product.

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

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63 The only outcomes assessment standard in the current version of the ABA accreditation standards involves a school's bar passage rate. See ABA Law School Accreditation Standards, found at http://www.americanbar.org/groups/legal_education/resources/standards.html
eventually will mimic the reasoning and analytical skills practiced through the questioning.\textsuperscript{64} In these classes, professors ask questions and the students follow up with answers. Eventually, the students are able to predict the questioning and develop a technique for answering those questions. The students then spend their time learning how to anticipate the questions the professor is going to ask. The goal of using these methods is to get the students to practice analytical reasoning, to answer questions and think “on their feet,” to use deductive, inductive and analogical reasoning, to solve hypothetical problems, and to engage in synthesis.\textsuperscript{65} Often, however, there is a lack of an explicit discussion about the types of reasoning or reasoning skill being taught.\textsuperscript{66} The students will often not know that the questioning is meant to practice their synthesis, analogical, inductive, and deductive reasoning skills. Because professors do not usually detail or explicitly discuss the goals of this method, they are engaging in implicit teaching—the students

\textsuperscript{64} Ruta K. Stropus, \textit{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 (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); Phillip E. Areeda, \textit{The Socratic Method: A Lecture at Puget Sound}, 109 Harv. L. Rev. 911 (1996) (noting that to have a successful Socratic discussion, the instructor must maintain control in order to keep the development clear, orderly, and moving).


\textsuperscript{66} See Niedwiecki, supra note 28, at 34. See also, Anita Schnee, \textit{Logical Reasoning “obviously”}, 3 Legal Writing J. Legal Writing Inst. 106 (1997).
are just suppose to understand the types of reasoning without the professor ever telling them that’s what they are doing. Often, this is a result of how many professors mimic what and how they were taught when they went to school. Other 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 students too much information. The problem, however, is that this process fosters an environment where the students focus on getting to the answer or developing an end-product. This failure of explicitly detailing the underlying thought process that gets the students to the answer or end-product will have a detrimental effect on the students’ ability to transfer their learning to new and novel situations.


69 See Michael Hunter Schwartz, *Teaching Students to be Self-Regulated Learners*, 2003 L. REV. MICH. ST. U. DET. C.L. 447, 467 (2003). In this article, he discusses the different views professors may have about law students, including:

1. Some students have an inability to learn what they need to learn in law school;
2. We are already doing everything we can to teach the students; and
3. Students could do better if they just worked harder.

70 See 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, 455-65 (1996) (noting the inadequacies of the Socratic Method). For an article criticizing the case method approach to teaching law students and offering suggestions on improving the learning of students. See also Robin A. Boyle & Rita Dunn, *Teaching Law Students Through Individual Learning Styles*, 62 Albany L. Rev. 214 (2001). This 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. This can be done primarily by teacher-student individual
A similar problem occurs in skills-based courses. Here professors teach students too much on how to perform a skill instead of the underlying reasoning for doing so. The 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. All of 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 particular skills, which are metacognitive skills. To better teach students to transfer these cognitive skills to new and novel situations, professors need to focus on training students to be better self-regulators of their learning through the explicit teaching of metacognitive skills and using more effective formative assessment techniques.

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. Whether the professor predominately uses final exams as a form of summative assessment or uses a series of drafts on papers as forms of formative assessment, the goal of assessment should be on improving student

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71 For examples of the formulas that are taught in legal writing courses, see Robin Wellford Slocum Legal Reasoning, Legal Writing, and Other Lawyer Skills 158-59 (3d ed. LexisNexis 2011) and Richard K. Neumann, Jr. & Sheila Simon Legal Writing 105-08 (Aspen 2008).
learning. 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.

In 1967, educational psychologist Michael Scriven developed a distinction between two types of assessment in education—summative assessment and formative assessment. He drew the distinction based on

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72 See J.B. Garfield, Beyond Testing And Grading: Using Assessment To Improve Student Learning, 2 JOURNAL OF STATISTICS EDUCATION (1994) (when assessment “is used appropriately to inform instruction, it can enhance student learning as well as document it”), found at http://www.amstat.org/publications/jse/v2n1/garfield.html; Jarene Fluckiger, Yvonne Tixier y Vigil, Rebecca Pasco & Kathy Danielson, Formative Feedback: Involving Students as Partners in Assessment to Enhance Learning, 58 College Teaching 136, 136-137 (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 The Journal of General Education 103, 105 (2006) (discussing the need for institutions to assess whether standardized test 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 in Higher Education 221, 222, 226 (2009) (finding that a formative peer assessment in the classroom improved student learning by enhancing their content knowledge as well as their self awareness and confidence).

73 See Rick Stiggins, From Formative Assessment to Assessment FOR Learning: A Path to Success in Standards-Based Schools, 87 PHI DELTA KAPPAN 324, 326 (December 2005); Dylan Wiliam & Paul Black, Meanings and Consequences: A Basis for Distinguishing Formative and Summative Functions of Assessment?, 22 BRITISH EDUCATIONAL RESEARCH JOURNAL 537, 537 (1996). Because governments in Western Europe have traditionally regulated higher education more than their United States counterparts, colleges and universities in Europe have been faced with developing assessment models well before they became more prevalent in the U.S.: 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 and Don F. Westerheijden, Towards a General Model of Quality Assessment in Higher Education, 28 HIGHER EDUCATION 355, 359 (Oct., 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 done in the U.K. to comply with these changes and additional requirements in the U.K. Much of this
the goals of each type 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.

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.

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research guides the analysis in this paper, including the important and influential work of Dylan Wiliam & Paul Black.

74 Id. See also Maddalena Tarras, Assessment—Summative and Formative—Some Theoretical Reflections, 53 BRITISH J. OF EDUC. STUDIES 466, 468 (December 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).

75 Id. at 328, citing to Michael Scriven, The Methodology of Evaluation, " in RALPH W. TYLER ET AL., EDS., PERSPECTIVES IN EVALUATION, AMERICAN EDUCATIONAL RESEARCH ASSOCIATION. MONOGRAPH SERIES ON CURRICULUM EVALUATION (Rand McNally, 1967)(explaining that as students engage in the assessment process, they are able to see their improvement and therefore are motivated to continue to learn). Tarras, supra note 74, at 468(explaining that formative assessment requires feedback that can determine a “gap” between the work being assessed and required standard, and how to close that gap).

76 Stephen Chappuis & Jan Chappuis, The Best Value in Formative Assessment, 65 INFORMATIVE ASSESSMENT 14, 14-16 (December 2007/January 2008) (determining that formative assessment can be used to determine a student's performance on important tests as well as any additional help that may be needed).

77 Id.

78 Many law schools require that the students in a course be graded on a curve or use some form of grade normalization. See 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 EDUCATION IN THE UNITED STATES: COMMENTARIES AND PRIMARY SOURCES 815 (Steve Sheppard ed., 1999).

79 See Chappuis & Chappuis, supra note 76 at 15.
Formative assessment, on the other hand, is specifically intended to provide feedback to the students during the learning process to improve the students’ learning. Formative assessment generally occurs before summative assessment. Using formative assessment provides information to both the students and teacher so they can adjust the learning and teaching process to promote further learning. It is an ongoing process that requires frequent testing, appropriate feedback, and additional opportunities to improve learning. Examples of formative assessment tools used in law schools include mid-term exams, feedback on drafts of student papers, and short reflective papers throughout the course.

Institutionally, one of the main purposes of assessment in law schools is to award grades to students, which is then used to make a series of decisions. For example, law school grades are often used to rank students,

80 See Jarene Fluckiger, Yvonne Tixier y Vigil, Rebecca Pasco & Kathy Danielson, Formative Feedback: Involving Students as Partners in Assessment to Enhance Learning, 58 College Teaching 136, 136-137 (2010) (describing that formative assessment helps students enhance their own learning and provides informed instruction); 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 The Journal of General Education 103, 105 (2006) (assessing a group project geared towards working on assessment techniques will enhance critical thinking skills for students involved who have taken ideas, criticism, tools and information from their peers); Philip Vickerman, Student Perspective on Formative Peer Assessment: an attempt to deepen learning?, 34 Assessment & Evaluation in Higher Education 221, 222, 226, 227 (2009) (explaining that formative assessment has helped students engage in deep learning rather than surface learning); Wilam & Black, Meanings and Consequences, supra note __, at 538 (finding that assessment is intended to produce results that are used to help students achieve set goals).

81 Id. at 15-18; Tarras supra note __, at 468 (“for 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”); Regina M. Panasuk & John LeBaron, Student Feedback: A Tool for Improving Instruction in Graduate Education, 120 Education 356, 359 (2000); Arthur Best, Student Evaluations of Law Teaching work well: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree, 38 Sw. L. Rev. 1, 16 (2008).

determine who can graduate, and provide employers with information about the relative competency of the students. At some schools, these grades are used to determine whether a student will be dismissed because the grade point average is below a required average. Missing from these institutional uses of assessment is the most important goal of assessment—evaluating the school’s curriculum and teaching to see if there are better ways to improve student performance and learning.

Another major criticism of legal education has been the lack of any formative assessment early in a course, with students only getting some feedback on a final exam, and that is usually not designed to improve a student’s performance on subsequent exams. A number of factors in legal education make it difficult to include formative assessment in law school classes, including the large size of many doctrinal courses, the time


84 See e.g., Douglas R. Haddock, Collaborative Examinations: A Way to Help Students Learn, 54 J. Legal Educ. 533, 546 (2004) (explaining that feedback is most useful when allowing a student to revise their thinking, a part of learning that is usually absent from the law school curriculum); Philip Kissam, Law School Examinations, 42 Vand. L. Rev. 460,465 (1989) (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 their work compared to other students); Rogelio A. Lasso, Is Our Student’s Learning? Using Assessment to Measure and Improve Law School Learning and Performance, 15 Barry L. Rev. 73, 79 (2010) (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 Bat, 45 San Diego L. Rev. 441, 448 (2008) (describing the law school classroom as a place where students get little to no feedback as to how they are doing which contributes to students feel inadequate); Charles B. Sheppard, The Grading Process: Taking a Multidimensional, "Non-Curved" Approach to the Measurement of a First-Year Law Student's Level of Proficiency, 30 W. St. U. L. Rev. 177, 180. (2002-2003) (arguing that first year law courses that use the traditional one-examination approach fail to adequately assess students).
constraints associated with being a professor (i.e., service and scholarship), and a lack of training on providing proper feedback to students.\textsuperscript{85} Unfortunately, many important elements are left out of the law school assessment process, including the goal of improving the students’ ability to self-assess and self-regulate their learning. By using the assessment process more effectively, especially through the formative assessment process, law schools can go a long way in helping their students’ learning abilities and sharpen their metacognitive skills.

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{86} 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{85} Rogelio A. Lasso, \textit{Is Our Student’s Learning? Using Assessment to Measure and Improve Law School Learning and Performance}, 15 Barry L. Rev. 73, 94 (2010) (suggesting that professors should learn how to teach self-learning strategies because many teachers do not know how to assess students properly or nor how advise students to teach themselves); Emily Zimmerman, \textit{An Interdisciplinary Framework for Understanding and Cultivating Law Student Enthusiasm}, 58 DePaul L. Rev. 851 (2009) (describing that having one exam determine the success of a student lacks formative assessment that professors must provide in order for students to become well-adjusting practicing lawyers, a part of law curriculum professors commonly overlook). \textit{See also} Mantz Yorke, \textit{Formative Assessment in Higher Education: Moves Toward Theory and the Enhancement of Pedagogic Practice}, 45 \textit{Higher Education} 477, 483 (2003) (listing the pressures that are common to higher education professors and instructors).

learning: “it 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.”87 Under this definition, the focus is on a joint process between the student and teacher.88 It includes several different techniques, including many that occur in most law school classrooms—classroom discussions, listening and observing students in the classroom, questions asked in class, and reading any written work of the students.89

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 those not engaged in formative assessment.90 The level of improvement of learning is based on the quality of the interactions between the student and the teacher, and whether the information provided during

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87 Id. at 7. See also David J. Nicol & Debra Macfarlane-Dick, Formative Assessment and Self-Regulated Learning: A Model and Seven Principles of Good Feedback Practice, 31 STUDIES IN HIGHER EDUCATION 199, 199 (April 2006)(“Formative assessment refers to assessment that is specifically intended to generate feedback on performance to improve and accelerate learning”).

88 Wiliam & Black, Meanings and Consequences, supra note 73, 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”); Regina M. Panasuk & John LeBaron, Student Feedback: A Tool for Improving Instruction in Graduate Education, 120 Education 356, 359 (2000) (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).


the formative assessment process is subsequently used by the teacher and the student.\textsuperscript{91} Regardless of these factors, their review of the studies showed that “attention to formative assessment can lead to significant learning gains.”\textsuperscript{92} Most importantly to law school, formative assessment can have a long-term effect on student learning.\textsuperscript{93}

One recurring theme throughout the research is that proper formative assessment should be used to assist students in becoming better self-regulated learners.\textsuperscript{94} As such, the goal of formative assessment is to determine where the students are going, where they are at that moment in time, and how can they can close the gap between the two.\textsuperscript{95} Providing feedback as part of the formative assessment process is essential to making the most gains possible in the students’ learning. Feedback is most helpful when it provides information about what was done wrong and how the student can correct the mistakes. The feedback should also focus the student

\textsuperscript{91} Id. at 16; Wiliam & Black, \textit{Meanings and Consequences}, supra note 73, at 544-46.
\textsuperscript{92} Id. For a summary of the research done by Black and Wiliam, see Paul Black & Dylan Wiliam, \textit{Inside the Black Box}, 80 PHI DELTA KAPPAN 139 (October 1998).
\textsuperscript{93} D. Boud, \textit{Assessment and Learning: Contradictory or Complementary?}, in P. Knight, ED. \textit{Assessment for Learning in Higher Education} 36-38 (Kogan 1995).
\textsuperscript{94} See generally Nicol & Macfarlane-Dick, supra note 87, Yorke, supra note 85, at 480-81.
\textsuperscript{95} Nicol & Macfarlane-Dick, supra note 87, at 205-206(noting that learners who are self-regulated through formative assessment are more persistent, resourceful, confident and higher achievers than those students who are not self-regulated). See also D.R. Sadler, \textit{Formative Assessment and the Design of Instructional Systems}, 18 Instructional Science 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); Regina M. Panasuk & John LeBaron, \textit{Student Feedback: A Tool for Improving Instruction in Graduate Education}, 120 Education 356, 359 (2000) (finding that students who are taught with the learner-centered, formative assessment approach gain greater control over their educational experience).
on the process of learning and completing the task instead of just getting to the end product.\textsuperscript{96}

Formative assessment contains four basic elements: 1) it identifies a gap in learning, 2) provides feedback to the student about the gap and closing the gap, 3) involves the student in the process, and 4) advances the students’ learning.\textsuperscript{97} In addition, Professors David Nicol and Debra Macfarlane-Dick, two learning theorists, listed the principles of formative assessment that will facilitate better self-regulated learning after reviewing most of the research done on formative assessment.\textsuperscript{98} 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 student, and provides information to professors so they can adjust their teaching.\textsuperscript{99}

Nicol and Macfarlane-Dick emphasized that the professor must clarify the specific goals of what good performance means.\textsuperscript{100} The professor must

\begin{itemize}
\item \textsuperscript{96} Nicol & Macfarlane-Dick, supra note 87, at 204-05.
\item \textsuperscript{97} Margaret Heritage, Formative Assessment: What Do Teachers Need to Know and Do?, 89 Phi Delta Kappan 140, 141 (October 2007).
\item \textsuperscript{98} Nicol & Macfarlane-Dick, supra note 87.
\item \textsuperscript{99} \textit{Id}. at 205-07. See also Stephen Chappuis & Jan Chappuis, The Best Value in Formative Assessment, 65 INFORMATIVE ASSESSMENT 14, 18 (December 2007/January 2008); Jan Chappuis, Helping Students Understand Assessment, 63 ASSESSMENT TO PROMOTE LEARNING 39, 39-41 (November 2005).
\item \textsuperscript{100} Nicol & Macfarlane-Dick, supra note 87, 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). See also, Jeffrey W. Barnes, 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, The "Non-Assessment" Assessment Project, 57 J. LEGAL EDUC. 521, 522 (2007)
\end{itemize}
explicitly show the goals of the assignment by stating clear learning outcomes, providing grading sheets or rubrics, or listing 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 are the goals of the course or assignment and the goals of the professor.

Of course, no assessment will be 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 mistakes, the reason for the error, or good examples 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

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101 For a discussion on learning outcomes, see Victoria VanZandt, *Creating Assessment Plans for Introductory Legal Research and Writing Courses*, 16 LEGAL WRITING 313, 323 (2010).


103 Id.; Nicol & Macfarlane-Dick, supra note 87, at 206 (“there must be a reasonable degree of overlap between the task goals set by the students and the goals originally set by the teacher”).

104 Id.
suggestions for improving, and involve praise and constructive criticism.\textsuperscript{105}

The feedback must be related to the goals of the assignment and the criteria that is being used to evaluate or grade the assignment.\textsuperscript{106} It should be a statement comparing the student’s actual level of work with what is being required in the course.\textsuperscript{107} Most importantly, good feedback from the professor will help students properly evaluate their work and self-correct when needed.\textsuperscript{108}

Good feedback will also help guide the teaching of the course.\textsuperscript{109} In fact, some claim that “instruction and formative assessment are indivisible.”\textsuperscript{110} One of the most accepted uses of formative assessment by professors is to “tailor their teaching accordingly.”\textsuperscript{111} For the professor to not only help the students with their learning, they should use the information taken from the formative assessment to self-reflect and self-assess their own

\textsuperscript{105} Id. at 208;
\textsuperscript{107} Tarras \textit{supra} note 74, at 468 (“for 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”).
\textsuperscript{108} Nicol & Macfarlane-Dick, \textit{supra} note 87 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”).
\textsuperscript{109} Nicol & Macfarlane-Dick, \textit{supra} note 87, at 212 (explaining that assessment helps teachers generate information about student’s level of understanding so they can adapt their teaching accordingly). \textit{See also}, Yorke, \textit{supra} note 85, at 482 (finding that teachers can use feedback to tailor their curriculum to move at the pace the student is learning); Black & Wiliam, \textit{Inside the Black Box}, \textit{supra} note 92, 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).
\textsuperscript{110} Id. \textsuperscript{111} Yorke, \textit{supra} note 85, at 482
teaching. It should require the professor to think if the lack of learning or mistakes made by the students could be changed with any modification of teaching instead of just accepting the students’ failure.\footnote{Nicol & Macfarlane-Dick, supra note __, at 214.}

Good feedback should also allow for an open and thorough dialogue between the professor and student.\footnote{Black & Wiliam, Inside the Black Box, supra note 92, at 143 (“opportunities 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, supra note 87, at 210; Yorke, supra note 85, at 487(explaining that a professor giving an assignment for students to comprehend and complete and receive a grade for makes for a situation where student and teacher can engage in a dialogue about how the assignment went for the individual student); Arthur Best, Student Evaluations of Law Teaching Work Well: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree, 38 Sw. L. Rev. 1, 16 (2008) (explaining that evaluation leads to a teaching-learning process where work is done by teachers and students); Regina M. Fanasuk & John LeBaron, Student Feedback: A Tool for Improving Instruction in Graduate Education, 120 Education 356, 359 (2000) (having an open dialogue between teacher and student helps students express their needs and enhance an instructors ability to meet those needs).} Effective feedback should be viewed by the teacher as “dialogue rather than as information transmission.”\footnote{Nicol & Macfarlane-Dick, supra note 87, at 210.} 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 this be on the topics that formed the basis of the assignments or aspects of students’ performance or feedback itself.”\footnote{Id., quoting R. Freeman & R. Lewis, Planning and Implementing Assessment 51 (Kogan Page 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 notes 129 to 140 and the accompanying text.} The feedback that is given to the student should provide an opportunity for the student to engage the professor in a discussion about the learning and the assignment, such as correcting misunderstandings from the feedback, developing a deeper understanding of the goals of the course.
and assignment, receiving immediate clarification and help with
difficulties. In skills courses, holding student conferences after feedback is
given and before another assignment is due will open this dialogue. One step
that professors can take, and which will be discussed in depth later in this
paper, is to incorporate self-assessment tools into the formative assessment
process along with student conferences to promote and encourage this
continuous dialogue. This process will provide the most information to be
exchanged while providing 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 will allow the professor and student to get at the heart of the issues
and problems with the learning process.

One of the dangers of formative assessment and significant feedback is
when the student becomes too dependent on the professor to complete any
task. To avoid this “learned dependence,” the professor must be aware
that their feedback will be taken as clues about what is expected for the
assignment, with the student’s 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 be

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117 Yorke, supra note 85, at 489, quoting D. Boud, supra note 93, at 51 (“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”).
focused on understanding the underlying process of the students’ learning, and the dialogue between the student and professor must work toward understanding the students’ learning and how that matches the task at hand. Essentially, the professor needs to put a greater emphasis on assessing the metacognitive abilities of the student.\(^{118}\)

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

Most relevant to law school teaching, good feedback also must facilitate the development of self-reflection and metacognitive skills.\(^{119}\) Because students are already engaging in some self-reflection during the learning process, the professor needs to know the substance of this internal feedback to better correct the process of their learning. If a student successfully completes an assignment but does it improperly, the student is not likely to make any necessary adjustments to correct the learning. Without knowing the internal thinking of the student, the professor is unable to correct any process errors. For example, a student may have found a


relevant case for an assignment but did so using methods that are not efficient or effective. Without questioning the student on how she found the law, the professor is unable to correct any process mistakes and the student may not be able to find the relevant law on future assignments. One way to obtain the internal thinking of the students is to ask process questions as part of the assignment. The professor may ask the students to detail how they found the law using a research log or asking to see their research trail when they use Lexis or Westlaw.

The most effective way to enhance the formative assessment process with the goal of better understanding the thinking of the students is to incorporate some type of self-assessments into the course. Integrating self-assessments into the formative assessment process have proven to help the student identify and correct more errors than just giving students an opportunity to self-assess before any feedback is given. Also providing the

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120 Students can print a report on their online research from Lexis or Westlaw. There is a link to their research history on both cites.

121 Nicol & Macfarlane-Dick, supra note 87, at 207. The idea that incorporating self-assessment into the formative assessment process was central to the thesis in their paper:

[0]ne effective way to develop self-regulation in students is to provide them with opportunities to practise regulating aspects of their own learning and to reflect on that practice. Students are (to some extent) already engaged in monitoring gaps between internally set task goals and the outcomes that they are generating (both internal and external). This monitoring is a by-product of purposeful engagement in a task... However, in order to build on this, and to develop systematically the learner’s capacity for self-regulation, teachers need to create more structured opportunities for self-monitoring and the judging of progression to goals. Self-assessment tasks are an effective way of achieving this, as are activities that encourage reflection on learning progress.

Id. See also Heidi Andrade & Anna Valtcheva, Promoting Learning and Achievement Through Self-Assessment, 48 Theory into Practice 12, (2009)(“Students who set goals, make flexible plans to meet them, and monitor their progress end to learn more and do better in school than those who do not”); Betty McDonald & David Boud, The Impact of Self-Assessment on Achievement: The Effects of Self-Assessment Training on Performance in External Examinations, 10 Assessment in Education 209, 217-
students an opportunity to self-assess during and after feedback is given requires the students to internalize the professor’s feedback.\textsuperscript{122} Often, students will look at the grade they receive or go over the comments without any real thinking about how to correct the mistakes going forward. Self-assessment surveys can be used to force a student to think about the feedback, how to set future learning goals, and how to correct any errors in the process of learning going forward.

Various self-assessment tools have been used in other areas of education successfully.\textsuperscript{123} Because lawyers are lifelong learners, one of the most important skills is the ability to self-assess their learning—an essential component to metacognition. Teaching the students how to self-assess and engaging them in the self-assessment process will train them to be better lifelong learners: “As part of being lifelong learners they will be effective lifelong assessors engaging in sustainable assessment.”\textsuperscript{124} They need to be

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\begin{itemize}
\item \textsuperscript{123} See e.g., Andrade & Valtcheva, \textit{supra} note 121, at 13 (finding that students internalize information that is provided by teachers when given a rubric or grading criteria that describes their varying level of quality in certain areas); David Nicol & Debra Macfarlane-Dick, \textit{Rethinking Formative Assessment in Higher Education: A Theoretical Model and Seven Principles of Good Feedback Practice}, found at http://business.heacademy.ac.uk/assets/York/documents/ourwork/tla/assessment/web0015_rethinking_formative_assessment_in_he.pdf (accessed July 30, 2011) (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 121, 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).
\item \textsuperscript{124} David Boud, \textit{Sustainable Assessment: Rethinking Assessment for the Learning Society}, 22 STUDIES IN CONTINUING EDUCATION 151, 152 (2000).
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able to identify when they have met the desired outcomes and do so without becoming learning dependent on others.\textsuperscript{125} Researchers have found that incorporating self-assessment in the formative assessment process is ideal, because it allows the student to more keenly focus on the feedback and how to use it to improve learning.\textsuperscript{126} Self-assessment activities can 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.\textsuperscript{127} In order for self-assessment to be the most successful in the classroom, the “students need:

- Awareness 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.”\textsuperscript{128}

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. Engaging the students in the self-

\textsuperscript{125} Id.; Yorke, supra note 85, at 489.
\textsuperscript{126} Paul Orsmond, Stephen Merry & Arthur Callaghan, \textit{Implementation of a Formative Assessment Model Incorporating Peer and Self-Assessment}, \textit{41 Innovations in Education and Teaching International} 273, 288 (2004) (explaining that feedback shifted a student’s focus from merely redoing work to rethinking their work, redirecting the use of classroom time to involve more critical thinking).
\textsuperscript{128} Adrade & Valtcheva, supra note 121, at 13.
assessment process during law school will give them the awareness, instruction in, and practice with this essential skill to lifelong learning.

IV. Incorporating Portfolios and Self-Assessment Tools into Skills Courses

One way to improve students’ metacognitive skills is through the formative assessment process. Incorporating self-assessment portfolios or some kind of self-assessment surveys throughout a course can be used to both assist the professor in the formative assessment process and to allow the students to practice this metacognitive skill.

The main purpose of these self-assessment tools is to have the students constantly reflect on their learning over the semester, and the portfolio allows the students to see their progress over the semester. For the professor, it gives more insight into the students’ thinking and learning process. It gives them a quick view of what the students think they need to improve and what they think they have already mastered. If there is some disparity between what the students believes about their learning and what the professor sees, it opens a line communication to better understand where the difference lies.129 This improves the dialogue process that is essential to good formative assessment. It also allows the professor to focus more on the process of the students’ learning instead of the end-product.

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129 This helps open the dialogue between the professor and student, one of the essential principles of formative assessment. Nicol & Macfarlane-Dick, supra note 87, at 210-11.
To create a portfolio, a series of self-assessments are assigned to the students throughout the course. Each one of the assessments draws upon some step in the metacognitive process—whether it is to focus them on their own awareness of cognition or engaging them in the process of planning, monitoring, or assessing their own learning. In moving the students toward these steps, the professor should create four basic types of self-assessment tools that are given at different points in the learning process.

The first self assessment should occur at the beginning of the course where the students articulate what they bring to course, including their past learning experiences, their own skill set, their cognitive abilities and preferences, and the skills required of the course. All of these questions

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130 Professors do not need to require a portfolio for the students to complete the self-assessment surveys detailed in this Article.

131 John Zubizarreta, The Learning Portfolio: A Powerful Idea for Significant Learning, Idea Paper #44, The IDEA CENTER 1, 2 (2008) (“the 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 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, 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, See Marcel V.J. Veenman, Bernadette H. A. M. Van Hout-Wouters, Peter Afflerbach, 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: “a) embedding metacognitive instruction in the content matter to ensure connectivity, b) informing learners about the usefulness of the metacognitive activities to make them exert the initial extra effort, and c) prolonged training to guarantee the smooth and maintained application of metacognitive activity.” *Id.*
should engage the students in that first stage of metacognition—the knowledge of cognition. This first assessment should be given during the first week or two of the semester. The assessment should be used to have the students state their expectations of the course, what they hope to learn in the course, and what previous experience they have with the material being taught in the course. The students are also required to list some goals for their learning, which helps them begin the metacognitive skill of planning. The assessment should be directed to the specific skills being taught in the course, so some self-assessment forms may differ based on the specific focus of the course. The types of questions that should be asked in this preliminary assessment include the following:

1. What does the phrase “lawyering skills” mean to you?
2. What is your greatest strength as a writer?
3. What is your greatest challenge as a writer?
4. What would you like to get out of this class?
5. Discuss your research experience (including undergraduate or other course work).

132 By engaging the students in the process of thinking about what they bring to the learning experience, you are engaging them in the knowledge of cognition phase of metacognition. This requires them to actively think about their past experiences and how those will impact their learning in the course. This metacognitive skill is essential to the learning process. See Veenman, et. al., supra note 131, 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 don’t and your actions go astray.”

133 Schraw, supra note 32, at 115; Emily Fox & Michele Riconscente, Metacognition and Self-Regulation in James, Piaget, and Vygotsky, 20 Springer Science and Business Media, LLC 373, 376 (2008).

134 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).
These questions could be tailored to the particular skills course that is being taught. The purpose of including some of the skills into the questions is to make sure that the student understands the cognitive skills that will be developed in the course. The questions listed above are designed for a first year legal writing course, so the questions focus on their previous experience in writing and research. This will allow the professor to determine if there are any skills that may need to be adjusted to survive law school or law practice. For example, many students may have never opened a book in a library and have only used Google or other search engines to do research. This will help make the students and the professor aware of the differences in research training in undergraduate education and law school. It also helps the students practice the control of their cognition by being aware of what they bring to law school and what is required in law school.

The second type of self-assessment tool is one that requires the students to assess an assignment that they just completed. It is given to the students immediately after they submit the assignment to the professor while they are still thinking about the work they just completed. The assessment should ask the students to identify their weaknesses and strengths in the assignment, allow the student to ask any questions that remain after they are done with the assignment, and to evaluate whether they met the goals of the assignment. Typical questions that could be asked with this assessment include:

1. List at least three skills you thought this assignment tested.
2. What do you think was the most difficult part of this assignment?

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. For a more detailed survey, see Niedwiecki, supra note 28, at 70-71.
3. Which skill do you think you mastered the most?
4. List three areas where do you think you need to improve?
5. If you could ask the professor three questions about the assignment, what would they be? You must ask three questions.
6. What grade do you expect to get on this assignment? (A to F). Explain why.

Because this assessment is done immediately after the papers are submitted, the students will have a clearer idea of where they struggled and where they were most comfortable in the assignment. It also allows them to ask any questions that were not answered earlier in the course. It essentially begins a dialogue between the professor and student regarding the skills in the class, one of the key principles to effective formative assessment. It serves two pedagogical goals—to engage the student in self-regulation and metacognitive skills, and to improve the formative assessment process by starting the conversation about the strengths and weaknesses in the paper. By knowing what the students perceive as their strengths and weaknesses, the professor can help the student improve the students’ control of their cognition. For example, if the student believes that he has a strength that the professor believes is a weakness, the professor knows where to start the dialogue with the student. It allows the professor to ask follow up questions that get at the process of how the students learn and correct any process or learning errors.

The third type of self-assessment is a post-critique assessment, which is given to the students when their critiqued papers are returned. The questions in this assessment 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 paper and before the
paper is returned to the student, 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 they have been able to
separate themselves from it for a week or two. Because these surveys 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
own paper right before they see the professor’s feedback and prepare them for
the feedback they are about to receive. Once the paper is returned, the
student is immediately required to see if their assessment of the paper
correlates with the feedback of the professor, allowing them to immediately
engage in further self-assessment. If the assessment is different between the
student and professor, it will require deeper thinking on the part of the
student to determine why there is this disparity.136 If not, this gives the
student and professor another point to open a dialogue about this disconnect.
Again, this enhances the formative assessment process because it requires

136 Mark Wilson & Kathleen Scalise, Assessment to Improve Learning in Higher Education: the BEAR
Assessment System, 52 Springer Science + Business Media 635, 37 (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); Kristina L.
Niedringhaus, Teaching Better Research Skills by Teaching Metacognitive Ability, 18 Perspectives:
Teaching Legal Research and Writing 113, 113-114(explaining that teachers need to know how to
plan their syllabus in a way that enables a student to plan a strategy, but it is the student’s job to
continuously reevaluate their progress to meet up to a teacher’s expectation).
By any other name?, 20 Springer Science and Business Media, LLC 469 (2008).
the students to engage in self-assessment, opens a dialogue with the professor, and allows the student and professor to work on the process of learning instead of the ultimate end-product.

The remaining questions for this assessment require that the students also internalize the feedback and set future goals for learning, all metacognitive strategies. Instead of just viewing the grade and making their own judgments about what happened, the students must thoroughly analyze the comments. Typical questions that can be asked in this post critique assessment include:

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

This assessment is another step in the monitoring and evaluating process of metacognition, something that is often left out of the learning process for novice learners. Requiring the students to set goals begins the entire metacognitive process over again for the next assignment and future
learning.\textsuperscript{137} It also requires that they see the gap between their current learning and the requirements of future tasks, and develop strategies to close those gaps. The ultimate goal is to engage the students in exactly the metacognitive process that they will continue to do when they are learning as lawyers and don’t have the help of a professor. These surveys allow the students to constantly practice self-assessment and the necessary metacognitive skills required of a lawyer.

The assessments that are given when the assignment is submitted and when the critique is given to the student should be repeated on every assignment. The goal is to have the student practice these metacognitive strategies repeatedly so they will begin to engage in this process automatically, a trait of expert learners.\textsuperscript{138} Constantly requiring the student to set goals, determine gaps in learning, monitoring the progress of learning and making appropriate adjustments, and evaluating when the task is done will lead to a greater chance that they will continue to take these steps when they practice law.\textsuperscript{139} For example, the employment lawyer discussed earlier

\textsuperscript{137} Daniel Dinsmore, Patricia Alexander, & Sandra Loughlin, \textit{Focusing the Conceptual Lens on Metacognition, Self-regulation, and Self-regulated Learning}, 20 Educ. Phychol. 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); Kristina Niedringhaus, Teaching Better Research Skills by Teaching Metacognitive Ability, 18 Perspectives: Teaching Legal Research and Writing 113, 113 (2010) (explaining that metacognition means that a student knows their learning preferences, strengths, weaknesses, the knowledge that must be gained, and the best way to gain that knowledge).


\textsuperscript{139} Ertmer & Newby, \textit{supra} note 20, at 1.
would have used these exact metacognitive skills when completing the project.

Using portfolios will enhance the experience for the students and professor as well. Placing the assignments in a portfolio will help the students and professors see the progression of the learning in the course and to see if errors are being repeated. This gives the student and professor another opportunity to address the process mistakes and adjust the student’s learning.

All of these assessment tools should be used in conjunction with student conferences and meetings. A quick review of the portfolio before a meeting with a student 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 student knows and where she should be. It 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 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

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140 Susan R. Dailey, Integrating Theory and Practice Through Teacher Portfolios, 4 Legal Writing Inst. 149, 150 (1998) (finding that teachers who use portfolios for their own work are more likely to create a curriculum is effective and flexible that enables a creative and reflective learning environment for students); Deborah Jones Merritt, Pedagogy, Progress, and Portfolios, 25 Oh. St. J. on Dis. Res. 7, 9 (2010) (explaining that a good portfolio is a valuable learning process because it helps students map, display and assess their achievements).
example, the student believes that his strength is how he organized his factual application section in an office memorandum, but the professor saw great gaps in reasoning, a discussion would ensue about why the student thought the application section was done well. This should produce much more information about exactly where the student is making the process error. As a result, these assessments make the meetings more efficient and helpful to the student because the professor and student have already identified the issues and have begun thinking about strategies to address them.

The final type of a self-assessment 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. Again, the questions focus on the student’s growth, areas of concern, and areas of improvement. The students should also review all of their previous self-assessments forms and determine if they met their goals and expectations. It also requires them to determine which skills they still need to develop further. Typical questions that appear on this final self-assessment include:

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

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 will be encouraged by their drastic improvements over the course of the semester.

V. Conclusion

With the current movement to increase the teaching of practical skills to law students, one of the most important skills that need to be taught 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 the end-product. Instead, law schools could improve the learning of their students by implementing strategies to assess the learning of their students by critiquing and providing feedback to the students 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 when they assess the learning of their students. By providing the students with more explicit training in metacognition and 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.