FIXING STUDENTS’ FIXED MINDSETS: PAVING THE WAY FOR MEANINGFUL ASSESSMENT

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I. INTRODUCTION

Picture a first-semester legal writing classroom. Students receive their first important graded assignment in law school. They anxiously flip through the pages of their office memo and see more markings on their papers than they have ever seen on anything they have written in the past. Their professor commented on their organization, their analysis, their use of authority, their grammar and punctuation, and even their citation. Overwhelmed by the feedback, students turn to the end of the memo to find their grade. Fixated on the score, one student immediately emails the professor. The email says, “Professor, I am shocked and disappointed in the grade I received on my memo. I received a B-, but I’m not a B- student. I would like to make an appointment with you to discuss my grade.”

When the student meets with his professor, she asks if he read her comments and suggestions. She reminds him that this is just one assignment and that he can improve on the next assignment if he incorporates her feedback. The student seems defensive. He says he read the comments and he just didn’t feel like he deserved a B-. When the professor tries discussing each comment with him, he becomes argumentative, justifying his work in each
part of the memo. Finally, he changes the topic, claiming that he worked for a law firm before law school and often wrote memos for the lawyers there. Before he leaves her office, the student tells his professor that her grading is unfair and her standards unclear.

That same day, the professor meets with another student, one who received a C+ on the memo assignment. Instead of arguing for a change in his grade, this student wanted to know how to improve. After the shock and disappointment of the low grade, he said he carefully read the professor’s comments. He said he wanted to meet with her so he could be sure he understood what she was asking him to do on the next memo. As the meeting ends, the student thanks the professor. He tells her that he never had a professor spend so much time giving the kind of detailed feedback she had given him on his writing. He says he appreciates the time she took to help him improve.

This experience prompted the professor to post a question on the Legal Writing Institute’s listserv.1 She asked, “Why the different reactions? One student took ownership of the problem and accepted my suggestions for how to improve. The other student denies there’s a problem and fails to seriously consider my comments. I’d be willing to wager which student will learn more from law school and from summer jobs.”2 The posting led to dozens of similar responses. These professors, like other law professors, continue to see a vast distinction in students’ reactions to the feedback they provide. They see students thankful for critical feedback, who use the feedback to learn and improve. But they also see students who don’t seem to benefit from the feedback. They either resist their professors’ guidance, often arguing defensively against it, or they become despondent, avoiding the professor rather than seeking help to improve.

1. Legal Writing Institute, Listservs, http://www.lwionline.org/mailing_lists.html (accessed July 29, 2011) (“The listserv is a closed discussion list intended to provide a forum in which scholars and teachers of legal writing can discuss topics in their field. . . . It now has approximately 600 subscribers. Only professional teachers of legal writing are eligible to join the listserv.”).

2. This scenario comes from a compilation of postings on the LWI listserv in June 2010. The authors used a literary strategy designed to provide an insider’s view without revealing the real characters represented by this somewhat fictionalized version of events. For uses of this technique, see Michael Bamberger & Alan Shipnuck, The Swinger (Simon & Schuster 2011), and Joe Klein, Primary Colors: A Novel of Politics (Grand C. Publg. 1996).
The listserv exchange brought life to a question that nags many legal writing professors. Why do students react so differently to the feedback they receive? And is there some way to deliver feedback so that all students use it to improve their performance? Although students’ reactions to feedback continue to baffle many legal writing professors, the questions are empirical rather than philosophical, and the answer lies in decades of established research in educational, social, and cognitive psychology. This research has been broadly applied in different fields to improve students’ performance.3

Students’ reactions to feedback are guided by the implicit beliefs they hold about intelligence.4 As the research demonstrates, students’ implicit beliefs about intelligence predict how they respond.5 Some students believe that intelligence is a fixed trait, that it remains fairly stable over the course of one’s lifetime.6 Others believe that intelligence is malleable, that people can significantly increase their intelligence during their lives.7 Researchers refer to people who believe that intelligence is a fixed entity as having a fixed or entity mindset, and they refer to people who believe that intelligence is malleable as having an incremental mindset.8 These different belief systems not only drive their reaction to feedback, but they also affect students’ goal orientation, effort, and persistence. As legal writing professors, we must first understand why students react to feedback in different ways in order to craft lasting solutions that will improve our effectiveness as teachers.

For years, legal writing professors have been expressing their dismay about students’ reactions to feedback. More recently, legal educators have become more focused on assessment and feedback in legal education.9 A growing chorus of authors and experts

3. Infra pt. II (discussing studies linking mindset and students’ reactions to difficulty in academic settings).
5. Id.
7. Id.
9. See e.g. Gerald Hess & Steven Friedland, Techniques for Teaching Law 285–290
has recommended that law schools change the way they assess students. The American Bar Association also entered the debate, and it will soon prompt a sea change in law school assessment by requiring law schools to “apply a variety of formative and summative assessment methods across the curriculum to provide meaningful feedback to students.” However, these changes have


10. See e.g. Munro, supra n. 9, at 4–5; Carnegie Report, supra n. 9, at 162–184; Curcio, supra n. 9, at 899–900; Schwartz, supra n. 9, at 504.

11. ABA Standards Review Committee, Proposed Guideline 304 (July 2011) (available
missed fundamental concerns that should precede any discussion about feedback: how will students view it, will they learn from it, and could more feedback actually harm some students. Thus far, proposed changes in law school assessment do not address the crucial problem that precedes any form of assessment—that problem is students’ implicit beliefs about intelligence or, as more popularly called, their mindset.

Diverse fields ranging from athletics to engineering to business have used mindset research to improve performance. However, this research has gone largely unnoticed in legal education, with legal educators still relatively perplexed when students behave in unsurprising ways. Before any form of assessment can succeed as a useful learning tool, law schools must dive into the deep well of established research to understand what lies beneath students’ responses to feedback. Therefore, before law schools adopt costly changes to curriculum, they should address students’ mindsets and their effects on students’ learning. Furthermore, legal writing professors are in a unique position to assist law schools in this new endeavor. They provide students with critical feedback, memorialized in writing, very early in their law school experience. Therefore, the way writing professors approach mindset and feedback have potentially profound effects on

at http://www.americanbar.org/groups/legal_education/committees/standards_review.html [ABA Proposed Guideline 304].

12. See generally Esat Alpay & Judith Ireson, Self-Theories of Intelligence of Engineering Students, 31 European J. of Engg. Educ. 169, 176 (2006) (demonstrating that an incremental view of intelligence was more likely to lead to favorable views of group work and greater orientation toward creative potential in engineering students); Peter A. Heslin et al., Keen to Help? Managers’ Implicit Person Theories and Their Subsequent Employee Coaching, 59 Personnel Psychol. 871, 895 (2007) (showing that business managers induced with an incremental mindset improved performance by increasing the amount of employee coaching given); Gail D. Heyman et al., Gender and Achievement-Related Beliefs among Engineering Students, 8 J. Women & Minorities in Sci. & Engg. 41 (2002) (showing that female engineering students are more likely to endorse a fixed mindset than male engineering students and suggesting that teaching female students an incremental mindset will improve their performance and address their tendency to drop out more frequently than male students); Marina Krakovsky, The Effort Effect, Stanford Mag. (Mar./Apr. 2007) (available at http://alumni.stanford.edu/get/page/magazine/article/?article_id=32124) (describing Dweck’s work with the Blackburn Rovers, a professional football team in the English Premier League).

13. But see Corie Rosen, The Method and the Message, 12 Nev. L.J. 160, 162 (2011) (arguing that one explanation for the high levels of law-student depression is the law school model that “encourages students to adhere to a belief in the fixed . . . theory of intelligence”).

the way students react to feedback in a writing class, in other law school classes, and even in the job market.

We proceed through the Article by first reviewing the studies that establish a relationship between beliefs about intelligence and responses to feedback, particularly the finding that students with a fixed mindset react to critical feedback in maladaptive ways. We then argue that the current environment in most law schools probably promotes a fixed mindset in its students. Next, we review the current recommendations to improve student assessment and feedback in law school and argue that these recommendations fail to address the fundamental problem—that students’ fixed mindsets lead them to maladaptive responses. Finally, we offer suggestions for professors and law schools that wish to foster an environment that nurtures adaptive responses to feedback. We conclude by urging more research focusing on the effects of mindset in the law school setting, and we urge law schools and professors to incorporate the current research on mindsets when developing new assessment techniques and measures.

II. STUDENTS’ IMPLICIT BELIEFS ABOUT INTELLIGENCE SHAPE THEIR RESPONSES TO FEEDBACK.

Three decades ago, Carol Dweck, a Stanford psychologist, became interested in how students respond to failure.15 What she found has grown into a significant body of research that has implications throughout a broad spectrum of disciplines.16 Her early studies involved children attempting to solve conceptual problems.17 Dweck and her colleagues gave fifth graders problems they could solve without much effort and then shifted to problems much too difficult for children in their age group.18 In some ways, the researchers’ results were unexpected. They found that some students, as expected, became despondent when they confronted failure.19 The children quickly stopped trying to solve the problems and displayed helpless behavior.20 While they enjoyed solv-

15. Dweck & Leggett, supra n. 6, at 256.
16. See e.g. supra n. 12; see generally Dweck, supra n. 8, at 23.
17. Dweck & Leggett, supra n. 6, at 256.
18. Id. at 257.
19. Id.
20. Id.
ing the easier problems, they became unhappy when they began to fail.\footnote{21} Instead of trying new strategies, they just quit trying.\footnote{22}

Other students, though, thrived despite their inability to solve the more difficult problems.\footnote{23} Most surprisingly, these students did not consider their inability to solve the difficult problems as failure.\footnote{24} Instead, they became excited to take on a new challenge, even when the problems were beyond their capacity to solve.\footnote{25} They greeted the challenging problems with statements like, “The harder it gets, the harder I need to try,” or “I love a challenge.”\footnote{26}

In trying to understand these diverse reactions, Dweck and her fellow researchers began to link students’ reactions to failure with their beliefs about intelligence.\footnote{27} Students believing intelligence is an innate trait behaved different than students believing intelligence can be acquired with effort. Each of us holds a belief about intelligence, and that belief forms a certain mindset and goal orientation.\footnote{28} These beliefs are implicit;\footnote{29} most of us are unaware that we hold a certain belief about intelligence,\footnote{30} and we are probably unaware that other people hold beliefs about intelligence that are different from our own.\footnote{31}

As Dweck’s studies reveal, some people implicitly believe intelligence is a fixed trait, while others implicitly believe that intel-
ligence is malleable.\textsuperscript{32} Students have what Dweck calls a fixed mindset if they believe that people have a certain amount of intelligence and that it does not change much over the course of a lifetime—regardless of what they do.\textsuperscript{33} People are born brilliant or talented; they do not become brilliant or talented. Students with a fixed mindset worry about their intelligence—how smart they actually are and how smart other people think they are.\textsuperscript{34} They have high levels of confidence when they perform tasks that they can master,\textsuperscript{35} and their classroom goals are to demonstrate their intelligence and avoid looking dumb, even at the cost of learning something new.\textsuperscript{36} These students will not ask questions unless the questions promote their intelligence in some way,\textsuperscript{37} nor will they seek needed help from their professors for fear of appearing unintelligent.\textsuperscript{38}

By contrast, Dweck labels individuals who consider intelligence to be fluid as having an incremental mindset.\textsuperscript{39} Students with an incremental mindset believe they have some control over their level of intelligence because intelligence is not a stable trait

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\item \textsuperscript{32} Dweck & Leggett, \textit{supra} n. 6, at 259. Dweck also calls the fixed mindset an entity mindset because people who have this mindset believe that intelligence is an entity that resides within us. Molden & Dweck, \textit{supra} n. 8, at 193. Researchers determine whether participants have a fixed or incremental mindset by using Dweck's Theories of Intelligence Scale that measures their level of agreement with statements such as, (1) "You have a certain amount of intelligence and you can't really do much to change it," (2) "Your intelligence is something about you that you can't change very much," (3) "No matter who you are, you can significantly change your intelligence level," and (4) "To be honest, you can't really change how intelligent you are." Carol S. Dweck, \textit{Mindset, Test Your Mindset}, http://mindsetonline.com/testyourmindset/step1.php (accessed Mar. 13, 2013) (containing Dweck's Implicit Theories of Intelligence Scale).
\item \textsuperscript{33} See Caroline Dupeyrat & Claudette Mariné, \textit{Implicit Theories of Intelligence, Goal Orientation, Cognitive Engagement, and Achievement: A Test of Dweck's Model with Returning to School Adults}, 30 Contemporary Educ. Psychol. 43, 44 (2005) (In implicit-theories literature, fixed and entity mindset are used inter-changeably.).
\item \textsuperscript{34} See Carol S. Dweck, \textit{Self-Theories: Their Role in Motivation, Personality, and Development} 15 (Psychol. Press 2000).
\item \textsuperscript{36} Dweck, \textit{supra} n. 34, at 15–16.
\item \textsuperscript{38} See Ying-Yi Hong et al., \textit{Implicit Theories, Attributions, and Coping: A Meaning System Approach}, 77 J. of Personality & Soc. Psychol. 588, 593 (1999).
\item \textsuperscript{39} Dupeyat & Mariné, \textit{supra} n. 33, at 44.
\end{itemize}
and can increase significantly over time and with effort.\textsuperscript{40} They approach academic challenges with the goal of increasing their intelligence.\textsuperscript{41} Their goal in the classroom is to learn.\textsuperscript{42} If they cannot immediately master new material, they try new strategies, muster more effort, or seek help.\textsuperscript{43}

This fundamental difference in mindset is at the root of how individuals interpret critical feedback and failure.\textsuperscript{44} A student holding a belief that intelligence is fixed, a fixed mindset, will be resistant to critical feedback no matter how it is phrased or how often it is given.\textsuperscript{45} A student with a belief that intelligence may grow, an incremental mindset, will accept feedback in the spirit it was intended—to nurture improvement.\textsuperscript{46}

Although researchers have not yet focused on law students, they have amassed studies targeting students across a vast array of settings.\textsuperscript{47} This research sheds light on many of the beliefs and behaviors we see in law students. The research compiled over the past three decades holds untapped potential to understanding law students’ mindsets and to understanding why they react the way they do to assessment and feedback.


Any discussion of how implicit beliefs about intelligence drive students’ reactions to feedback must start by addressing the concept of intelligence. However, few agree on what intelligence is, even the experts.\textsuperscript{48} Those researching implicit beliefs are not fo-
cused on defining intelligence or even weighing in on whether intelligence is fixed or whether it incrementally changes. Instead they narrow their focus on people’s beliefs about intelligence, including how they define it, and how these beliefs predict motivation, strategy use, and reactions to difficulty in an academic setting.

Whether intelligence can grow significantly in one’s lifetime is debatable, but the way students react based on their beliefs about intelligence is well established. Objectively defining intelligence is not the purpose of this paper, and the authors encourage readers to suspend judgment on what intelligence is. It is people’s beliefs about intelligence—measured by their level of agreement with certain simple statements like “Your intelligence is something about you that you can’t change very much” or “You can change even your basic intelligence level considerably”—that shape how they respond to feedback, difficulty, and failure.

Not surprisingly, people define intelligence consistent with their implicit beliefs about intelligence. Although most law students, if asked, would probably consider themselves smart, but smart does not mean the same thing to all students. Undergraduate students with a fixed mindset said that doing well on an exam, outperforming their classmates, or finding tasks easy indicated they were smart. By contrast, students with an incremental mindset said they felt smart when they worked on challenging assignments or were able to explain difficult concepts to others. For example, when asked “When do you feel smart?” students with a fixed mindset said, “When I don’t make any mistakes,” and “When I finish something fast and it’s perfect.” On the other hand, a student with an incremental mindset feels smart “[w]hen I work on something a long time and I start to figure it out.”

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\textit{rates World-Class Performers from Everybody Else} 40–45 (Portfolio 2008) (discussing controversy over defining intelligence and the IQ test).
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\item[49.] Joshua Aronson et al., \textit{Reducing the Effects of Stereotype Threat on African American College Students by Shaping Theories of Intelligence}, 38 J. Experimental Soc. Psychol. 113–115 (2002).
\item[50.] Molden & Dweck, supra n. 8, at 193–194, 196–197, 201.
\item[52.] Dweck, supra n. 34, at 15.
\item[53.] Id.
\item[54.] Id.
\item[55.] Id.
\item[56.] Id.
\end{enumerate}
A student’s definition of what smart means influences the student’s goals and self-efficacy. For instance, students who believe they are smart when they finish quickly and the work product is perfect will probably avoid assignments that take significant effort and that will inevitably lead to mistakes. And when they get feedback that identifies their mistakes, it may challenge their self-efficacy because mistakes, to these students, mean they aren’t all that smart. On the other hand, students who feel smart when working hard to figure out a difficult problem will seek more challenging work and will not be deterred by mistakes if the mistakes help them eventually figure out the problem.

B. Mindset Predicts Behavior.

Regardless of mindset, students respond in similar ways to successful academic accomplishments—like solving a problem or receiving a good score on a test. Students who are succeeding maintain high motivation, high levels of confidence, and persistence at academic tasks. The different mindsets become apparent, and critical, when students begin having difficulty with a task. After experiencing failure or critical feedback, students with a fixed mindset display helpless behavior. They blame their lack of ability for the failure, decrease their efforts, reduce their use of learning strategies, and often blame uncontrollable factors for their poor performance.
Even small, insignificant hurdles can affect students’ performance. Researchers demonstrated how simple confusion can create helpless behavior in students with a fixed mindset. The study presented children with five sections of reading and a short comprehension test. Three of the sections were the same for all children. Only two sections differed. Half the students with a fixed mindset received books with confusing sentences embedded in the two sections, and the other half received a regular book, one without the confusing sentences. The same was true for incrementally orientated students. Regardless of mindset, students given the regular books scored indistinguishably on the test. But the students who received books with confusing sections earned significantly different test scores. Students with an incremental mindset had a mean score of seventy-one percent on the comprehension test, while students with a fixed mindset had a mean score of thirty-four percent. This experiment captures the helpless behavior students with a fixed mindset exhibit when confronted with difficulty—and in the experiment the difficulty was merely some initial confusion. They essentially gave up when the task became difficult. The students with an incremental mindset, though, remained relatively unfazed.

Students who view intelligence as a fixed trait also tend to have performance goals, and students who view intelligence as malleable tend to have mastery goals. While mastery goals have been shown to optimize learning, students with performance goals want to outperform their peers and to appear intelligent. Because it is important for performance-goal-orientated students to appear intelligent, they will use strategies to promote and preserve that appearance. These strategies may include avoiding difficult tasks, cheating on assignments, and making external

65. Id. at 630.
66. Id. at 631.
67. Id.
68. Id.
69. Id.
70. Id. at 633.
71. Id.
73. Id.
74. Dupeyrat & Mariné, supra n. 33, at 54.
excuses for poor performances.\textsuperscript{77} Performance goal-orientated students typically do not take remedial actions to improve unsatisfactory performances because their only goal is to outperform others on the task at hand.\textsuperscript{78} If they fail at that goal, remedial actions, including increased effort, will not help because they believe intelligence cannot be increased and the performance is over.\textsuperscript{79}

By contrast, mastery-goal-orientated students are more concerned about learning than outperforming their peers or impressing their instructors.\textsuperscript{80} Consequently, challenging assignments do not intimidate them.\textsuperscript{81} They see challenges as opportunities to learn new things.\textsuperscript{82} Poor performances only represent one snapshot in time; the performance does not define them.\textsuperscript{83} Poor performances are opportunities to learn new strategies or a wake-up call that they need to increase their effort.

Students who hold performance rather than mastery goals react differently to feedback, often choosing to protect their egos at the expense of learning how to improve. These differences in goal orientation extend to students’ behavior when they interact with their peers.\textsuperscript{84} In one study, undergraduate students were given critical feedback after a speed-reading test.\textsuperscript{85} Students were informed that the test was indicative of general intelligence.\textsuperscript{86} All students, regardless of their actual performance were told they
had scored in the thirty-seventh percentile of the student body.\textsuperscript{87} The researchers wanted the result to threaten students’ self-esteem and position them for both upward and downward comparison.\textsuperscript{88} Students were then presented with results of other fictitious participants who had previously participated in the speed-reading exercise.\textsuperscript{89} The results included the fictitious participants’ percentile scores and the strategies they used to attain those scores.\textsuperscript{90} Students in the study could use the fictitious results to look at the speed-reading strategies of others who had performed better or worse than the thirty-seventh percentile.\textsuperscript{91} Students with a fixed mindset compared themselves to participants scoring worse than the thirty-seventh percentile, and students with an incremental mindset compared themselves to higher achieving participants.\textsuperscript{92} In order to maintain an image of intelligence, students with a fixed mindset abandoned any hope of learning to improve their skills and studied only the strategies of the students they outperformed.\textsuperscript{93}

When researchers studied the brain’s electrical activity in students with different mindsets, they confirmed that students’ brain activity differs when they receive feedback and that the different reactions are linked to mindset. One study divided over four hundred undergraduate students into groups having either strong fixed or incremental mindsets.\textsuperscript{94} The students took a general knowledge test.\textsuperscript{95} During the test, brain electrical activity (EEG) was recorded.\textsuperscript{96} After each question the students gave their best answer and then rated their confidence in their answer.\textsuperscript{97} The feedback to students came as a red asterisk for a wrong answer and a green asterisk for a correct answer.\textsuperscript{98} If the student got the answer wrong, the correct answer then flashed up on the
screen. After completing the test, the students were given a short break and tested again on the questions they initially got wrong. The students were unaware that they would be retested.

On the retest, students with an incremental mindset improved their scores significantly more than students with a fixed mindset. More importantly, brain activity varied dramatically between the groups. Students with a fixed mindset displayed more brain activity at frontal electrodes immediately following negative feedback—the red asterisk. The larger frontal-brain response suggests they were hyper-responding to negative feedback. Moreover, the enlarged frontal response correlated with students’ self-reports of threats to their self-perception.

When presented with the correct answers, students with a fixed mindset displayed less brain activity related to semantic processing than students with an incremental mindset. Semantic processing is considered necessary for future memory retrieval. Unlike the students with an incremental mindset, the students with a fixed mindset were not processing the correct answers as deeply when they appeared on the screen. Essentially, the students with a fixed mindset processed the fact that they got the answer wrong, but stopped processing after that. Thus, they had poorer recall later when asked to answer the questions again.

These and other studies on how students’ mindsets drive their reactions to feedback have serious implications for legal education. Law schools train students for a career that will regularly challenge them. The law changes, technology changes, and clients present novel questions that have not yet been explored.

99. Id.
100. Id.
101. Id.
102. Id. at 79.
103. Id. at 82.
104. Id. at 82–83 (reporting that regardless of whether the students indicated low or high confidence in their answer the negative feedback triggered the same brain activity).
105. Id. at 83.
106. Id. at 84.
107. Id. at 82.
108. Id. at 84.
109. See infra pt. III (demonstrating that a significant portion of law students enter law school with a fixed mindset, and that mindset is probably leading them to behave maladaptively in response to even carefully crafted feedback).
110. Carnegie Report, supra n. 9, at 12–45.
What we hope for in a legal education is to show students how to learn from their experiences and mistakes and where to look when they need more help. Students will need to enter their careers knowing that they do not yet have all the skills they need but confident that they can acquire them as they develop as lawyers. These studies tend to cast doubt on our hopes for many students. If we do nothing to change students’ fixed mindsets, we cannot expect them to become life-long learners.

C. Consequences of the Different Mindsets in a Law School Setting

In law school, mindsets lead students in different directions. For many law students, law school presents their first real academic challenge. Therefore, it may also be the first time their mindset will impact their response to criticism and subsequent academic performance in a significant way. Students entering law school are typically high achievers who have experienced academic success in high school and college. They enter law school with a higher perception of themselves and a higher sense of wellbeing than other recent college graduates. For many, law school will be the first arena where they will struggle with the material and where they most likely will not rank at the top of the class. The feedback many students will receive in law school will be the first arena where they will struggle with the material and where they most likely will not rank at the top of the class. The feedback many students will receive in law

111. See id. at 33–43.

112. See e.g. Linda S. Anderson, Incorporating Adult Learning Theory into Law School Classrooms: Small Steps Leading to Large Results, 5 Appalachian J.L. 127, 132 (2006) (stating that “our students must learn to understand their own learning well enough to continue to teach themselves once they have left our classrooms”).

113. See infra sec. III(B) and accompanying text (noting that legal writing professors have documented anecdotal examples of how differently students react to feedback—some learning from it and some becoming demoralized).


116. Lawrence S. Krieger, The Inseparability of Professionalism and Personal Satisfaction: Perspectives on Values, Integrity and Happiness, 11 Clin. L. Rev. 425, 433 (2005) (reporting incoming law students were happier, better adjusted and more idealistic than a comparison undergraduate sample).

117. See Alaka, supra n. 14, at 26–29; Jennifer Jolly-Ryan, Promoting Mental Health in
school will be fundamentally different than what they had experienced in the past.\textsuperscript{118} It may be the first time that they will have to confront mediocrity or failure.\textsuperscript{119} Law school, for students with a fixed mindset, can deliver a devastating blow to self-esteem and motivation.\textsuperscript{120}

Studies show that students with a fixed mindset view even an initial evaluation, e.g. the student’s first written legal memo, as a reflection of their overall intelligence,\textsuperscript{121} and in law school the first evaluation is often full of constructive criticism. Students’ subsequent performance on a task—that may have been better or worse than the initial evaluation—do not change the students’ beliefs about their initial performance and what that performance said about their intelligence.\textsuperscript{122} Students with a fixed mindset believe the initial evaluation represents a judgment of their intelligence at the time of the evaluation and forever more.\textsuperscript{123} They attribute any variation in evaluation to non-ability causes, such as luck, harshness of grading, or difficulty of the assignment.\textsuperscript{124} By contrast, students holding an incremental mindset interpret their most recent evaluation rather than their first evaluation as an indication of their intelligence.\textsuperscript{125}

\textit{Law Schools: What Law Schools Can Do for Law Students to Help Them Become Happy, Mentally Healthy Lawyers,} 48 U. Louisville L. Rev. 95, 111 (2009) (observing that “some law students have the very real problem of adjusting to the new demands of law school, particularly when they do not perform as well academically[, and the result is that the majority of law students feel frustrated, devalued, disengaged, and shut out from the highest rewards and prizes law schools have to offer”).

\textsuperscript{118} See \textit{Carnegie Report}, supra n. 9, at 165; \textit{Alaka, supra n. 4\textsuperscript{4}}, at 20–21, 25.

\textsuperscript{119} See \textit{Carnegie Report, supra n. 9, at 165–166 (noting students’ reactions to receiving grades in law school).}

\textsuperscript{120} See \textit{Krieger, supra n. 115, at 117.}

\textsuperscript{121} See \textit{Butler, supra n. 45, at 966–967, 975 (In this study, the authors tested whether participants’ beliefs about their ability was fixed or incremental would predict the inferences they made about their own performance and the performance of another when performance over time either improved or declined. They showed a significant correlation—demonstrating that those with a fixed mindset are more likely to infer more ability when performances increased over time. The authors explain that those with a fixed mindset likely see the first performance as diagnostic of “true” ability, and they attribute declining performance to outside forces such as luck.).}

\textsuperscript{122} \textit{Id.} at 973.


\textsuperscript{124} See \textit{Butler, supra n. 45, at 975.}

\textsuperscript{125} \textit{Id.} These studies might explain why legal writing professors struggle in the grading process with a grading anchor. For instance, if a professor gives students a relatively
Students with a fixed mindset don’t adequately value their subsequent performances because, as researchers demonstrated, students with a fixed mindset often believe that one test can measure how smart they are. In one study, researchers simply pointed to a box and told students that the box contained a test intended to measure an important ability in school. Without ever showing the students the contents of the box, the researchers then asked the students to tell them what the test measured. All students answered that the test measured an important academic ability. But the students with a fixed mindset, and not the students with an incremental mindset, also said that the test measured “how smart you are” and “how smart you’ll be when you grow up.”

How students come to explain their performance on academic tests matters because students need accurate assessments of their ability in order to improve. However, students with fixed mindsets fail to accurately adjust their views of intelligence over time because they do not see intelligence as fluid. They do not have good internal explanations for why their test scores improve or decline. They must, instead, turn to external explanations, such as claiming the test was unfair or the professor was unclear. Furthermore, accurate assessments are unnecessary for students with a fixed mindset who would rather look smart than learn something new. On the other hand, students with an incremental mindset depend on accurate assessments of their progress to improve. They take feedback in the way it was intended.

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126. Dweck, supra n. 8, at 26.
127. Id.
128. Id.
129. Id.
132. Dweck et al., supra n. 130, at 646.
133. Id. at 646–647.
ed—as a measure of their current abilities and as a guide to increase their abilities in the future.

Because they have inaccurate views of their abilities or they want to avoid looking unintelligent, students with a fixed mindset do not seek available help when they really need it.134 On the other hand, students with either mindset tend to seek help when they are succeeding. Researchers exposed this phenomenon in a study conducted at the University of Hong Kong, where all classes are taught in English.135 Students in the study were asked if they would sign up for an optional remedial English class.136 For those who were already proficient in English, there was no significant difference between students with a fixed mindset and those with an incremental mindset who said they would take the remedial class.137 However, for students with English deficiencies, the difference was significant.138 Low-performing students with an incremental mindset said they would take the course to improve their English. On the other hand, a significant portion of the low-performing students with a fixed mindset chose not to take the course.139 Those students preferred to remain deficient in a needed skill rather than expose their weaknesses.140

The fear of appearing unintelligent, even to oneself, impedes learning for fixed-mindset students even when they know that learning the material is crucial to their future careers. In a study using engineering students,141 participants were randomly assigned to one of two groups. In group one, the researchers induced a fixed mindset, and in the other group researchers induced an incremental mindset.142 The students were told to complete four assignments, and they were told that these assignments evaluated skills crucial to becoming an engineer.143 Regardless of how the students actually scored on the assignments, all students were told they received a score of five out of five on the first three assignments and scored only two out of five on the fourth assign-

134. Ying-Yi Hong et al., supra n. 38, at 593–594.
135. Id.
136. Id.
137. Id. at 593–594.
138. Id.
139. Id.
140. Id. at 597.
141. Nussbaum & Dweck, supra n. 47, at 604.
142. Id.
143. Id.
The engineering students were then given an option to pick one of the four assignments, watch a tutorial on that test section, and then retake that section. All students opted to watch a tutorial. But the students’ choice of which tutorial to watch and which assignment to retake differed significantly. Ninety-one percent of students with an incremental mindset chose to watch a tutorial for the section on which they had scored lowest. In contrast, 40 percent of students with a fixed mindset chose to watch the tutorial and retake the test for the assignment on which they had already scored a perfect five out of five. A significant portion of the students with a fixed mindset ignored their deficiencies and took the test that assured them success. They were motivated only to defend their image, and that led them to actually avoid learning something crucial to their chosen career.

III. LAW SCHOOLS’ STATE OF MIND

A. The Authors’ Pilot Study Shows a Significant Number of Law Students Have a Fixed Mindset and Will Not React Adaptively to Assessment and Feedback.

This Article is based on the authors’ hypothesis that a significant proportion of law students hold a fixed mindset towards intelligence and these mindsets are at the heart of why many law students react maladaptively to assessment and feedback. To preliminarily test this hypothesis, we measured the mindsets of an incoming first-year class at a state-funded law school in the southwest. During orientation week, we asked the new law students to complete a survey measuring their implicit theories of intelligence. When the students completed the inventory, they

144. Id.
145. Id. at 605.
146. Id.
147. Id.
148. Id.
149. Id.
151. University IRB approval was received prior to collecting data (on file with Authors). To determine students’ mindsets, we used Dweck’s Implicit Theory of Intelligence Inventory. Students responded to three simple statements. For example, students were asked to agree or disagree that “Intelligence is something you can’t change very much.”
had not been exposed to the law school environment for more than a few days. One hundred students completed the assessment.152 Twenty-five percent of the participating students displayed a fixed mindset,153 twenty-five percent displayed an incremental mindset, and fifty percent did not reach incremental or fixed mindset extremes.154

This pilot study serves as an indicator of what we might expect with an incoming class of law students.155 Although more testing should be done, we think it is reasonable to assume the mindsets captured in our pilot study are a good representation of first-year law students’ mindsets as they enter the law school environment.

Based on our pilot study, a significant proportion of our students will display maladaptive reactions to critical feedback—no matter how thoughtful the assessment. Our study provides an explanation for the students’ reactions to feedback that many professors have been commenting on for years.156 Their experiences shed light on students’ different mindsets in the law school setting.157

B. Law Students’ Contradictory Responses to Feedback Are Well-Documented and Provide Evidence of Law Students’ Mindsets.

Intrigued by students’ contradictory reactions to feedback, professors have been collecting and sharing anecdotes of these

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152 Sperling & Shapcott, supra n. 150.
153 Id.
154 Id. Reliability for scale. Entity items α = .95. Incremental items α = .90.
155 See Dweck & Molden, supra n. 34, at 123. Generally, most populations are about evenly split, with 40 percent of the students holding a fixed mindset, 40 percent holding an incremental mindset, and 20 percent falling somewhere in the middle. Id.
156 See e.g. Alaka, supra n. 14, at 3; Anna P. Hemingway, How Students’ Gratitude for Feedback Can Identify the Right Attitude for Success: Disciplined Optimism, 19 Persps. 169, 169 (2011).
157 See infra sec. III(B).
reactions for years. Students’ responses to feedback in legal writing classes provide a good example of how their different mindsets play out in the law school setting, and some of the best examples of students’ mindsets come from scholarship written by professors who teach legal writing.

Legal writing professors have long acknowledged the importance of formative assessment. These professors report spending more time on assessment and critique than on their other job responsibilities. And students in legal writing classes say they receive far more critical feedback from their legal writing professors than they received from their professors in undergraduate school. Some describe the sheer amount of professor’s ink on their papers as unexpected. When something unexpected happens, people search for a cause or a meaning. The meaning they derive from feedback arises from their underlying theories of intelligence and drives their responses. Therefore, tapping into students’ responses in legal writing classes provides a window into students’ mindsets.

Sheila Rodriguez described two different first-year students reacting to feedback in their writing classes. One student said: “I viewed legal writing as a new challenge that I needed to work on to get better. I never viewed myself as having control. I still do not feel I have control over legal writing. I have the tools to write well, but it is still a challenge.” Another student commented on an email from her writing professor, who thought she was not grasping the CRAC organizational paradigm. That student said,

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158. See e.g. Alaka, supra n. 14, at 3; Anne M. Enquist, Unlocking the Secrets of Highly Successful Legal Writing Students, 82 St. John’s L. Rev. 609, 623–667 (2008) [hereinafter Unlocking Secrets]; Anne Enquist, Critiquing Law Student’s Writing: What the Students Say Is Effective, 2 Leg. Writing 145, 155–209 (1996); Goode, supra n. 9, at 238; Hemingway, supra n. 156, at 169; Rodriguez, supra n. 9, at 210.

159. See e.g. Carnegie Report, supra n. 9, at 104; Anne Enquist, Critiquing and Evaluating Law Students’ Writing: Advice from Thirty-Five Experts, 22 Seattle U. L. Rev. 1119, 1120 (1999).


161. Id. at 20–21, 25.

162. Id. at 27–28.


164. Dweck & Molden, supra n. 35, at 122.

165. Rodriguez, supra n. 9, at 209.

166. Id.

167. Id.
The email was tactfully worded and showed [the professor's] concern and desire to help me, but for me . . . it was cutting. I burst into tears immediately and contemplated rash thoughts like dropping out of law school. Certainly this email meant that I could never have a successful career as a lawyer.168

The two students Rodriguez identified demonstrate the two different mindsets. The first student showed a discomfort with the new skill that she was learning, but she viewed legal writing as a challenge, something she needed to work on to get better. The second student saw a helpful comment, pointing out a deficiency in her paper, as an indication not of her legal writing skills at this early stage in law school, but as a comment that she would “never have a successful career as a lawyer.” Like the children in Dweck’s study who said the test in the box was a measure of how smart they were and would ever be,169 this student saw feedback on an early legal writing assignment as an indication of what kind of lawyer she would ever be.

Additionally, Anne Enquist published a valuable study attempting to unlock strategies of successful legal writing students while exposing the unsuccessful students’ strategies.170 Her article provides a good example of how different students respond to feedback:

Looking at the three students who were disappointed with their pre-trial brief grades—Marie, Andy, and Teresa—one cannot help but notice that the degree to which they blamed someone other than themselves for their lack of success correlated almost exactly with how they eventually did in the course. Marie stayed stuck on blaming Professor Lee; as a result, she did little or nothing to address her problems and ended up with the lowest grade on the appellate brief and the lowest grade in the course. Andy never fully gave up on the idea that Professor Lee was somehow at fault for his lack of success, but he did acknowledge and address some of his shortcomings; as a result, his grades improved one full letter grade, ending the course with a B minus. Teresa, by contrast, never seemed to look for a scapegoat on which to

168. Id.
169. See supra nn. 126–129 and accompanying text.
170. Enquist, Unlocking Secrets, supra n. 158.
blame her lack of success on the pre-trial brief. Instead, she shifted into “problem-solving mode,” tackling each weakness and addressing each problem. As a result, she improved a full letter grade on the appellate brief, ending the course with a B plus.\textsuperscript{171}

In Enquist’s study, despite a professor’s hard work in providing students with constructive feedback, some students refused to recognize the value of the feedback and instead blamed the professor for their failings. Others used the feedback to improve. The students Enquist describes have different mindsets, and their mindsets control how they view themselves and, consequently, how they will react to critical feedback.

Teresa displayed an incremental mindset. She took the comments as they were intended, as a way to improve her writing. She gave more effort and rose to the challenge of solving a new problem. Teresa behaved like the incremental-oriented children in Dweck’s studies. When they faced unsolvable problems, one child rubbed his hands together and proclaimed, “I love a challenge.”\textsuperscript{172}

Marie displayed a fixed mindset. Like many of the fixed-mindset students in earlier studies, she displayed helpless behavior. Instead of putting forth more effort to improve, she seemingly abandoned attempts to use the feedback she received to improve her writing. She reacted defensively, attributing her lack of success to an external cause, her professor.\textsuperscript{173}

Andy also displayed a fixed mindset, only he was able to accept the fact that to perform well in the class he had to make the changes the professor suggested. Students with fixed mindsets tend to pursue performance goals.\textsuperscript{174} And those performance goals can help students do what is necessary to achieve an acceptable grade.\textsuperscript{175} But the cost of maintaining these goals can be devastating.\textsuperscript{176} They can lead students to anxiety and depression.\textsuperscript{177} They

\textsuperscript{171} Id. at 667.
\textsuperscript{172} Dweck, \textit{supra} n. 34, at 10.
\textsuperscript{173} See Enquist, \textit{Unlocking Secrets}, \textit{supra} n. 158, at 626.
\textsuperscript{174} See \textit{supra} sec. II(B).
\textsuperscript{175} Dweck, \textit{supra} n. 34, at 15–16.
\textsuperscript{176} Id. at 47–49; Jolly-Ryan, \textit{supra} n. 117, at 102–103 (lamenting the majority of law students enter law school enthusiastic, optimistic, and happy, with positive attitudes and hopeful ambitions but research indicates that their enthusiasm, confidence, and mental stability quickly decline their first year in law school); Stephen M. Siptroth, Student Au-
can also take the excitement out of learning. Failure to meet performance goals may also deflate students’ self-esteem. Although students might make it through law school driven primarily by performance goals, the practice of law offers challenges unmatched in difficulty to the law school curriculum. Students who are motivated solely by performance goals are bound to be shaken when they finally take on a challenging practice.

IV. CURRENT SUGGESTIONS TO IMPROVE ASSESSMENT AND FEEDBACK IN LAW SCHOOLS FAIL TO CONSIDER STUDENTS’ IMPLICIT BELIEFS ABOUT INTELLIGENCE.

Soon, the ABA will require law schools to provide more formative assessment opportunities, evidently assuming that simply providing more feedback designed to improve students learning is enough to foster better student outcomes. Formative assessment is “[a]nything that measures student learning during the learning process, rather than as a final judgment tool.” However, to a student with a fixed mindset, all assessment is summative rather than formative—a judgment about a fixed trait—not a way to increase intelligence. If a significant portion of law students hold a fixed mindset, they will continue to respond maladaptively to almost any feedback no matter how carefully it is devised. Furthermore, providing more assessment might actually have detrimental effects on many students, including shifting students toward a more fixed mindset, or increasing their vulnerability to

\[\text{Forming the Human Person: Can the Seminary Model Save the Legal Profession?} \quad \text{2007 BYU Educ. & L.J. 181, 181–183 (blaming the format of legal education for increased incidence of depression, anxiety and substance abuse in law students and lawyers).}
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\[\text{177. Dweck, supra n. 34, at 47–49; see also Rosen, supra n. 13, at 162 (arguing that law students’ fixed mindsets are one cause of depression).}
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\[\text{178. Dweck, supra n. 34, at 29–32.}
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\[\text{179. Id. at 47–50.}
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\[\text{180. See id. at 15–16.}
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\[\text{181. Carnegie Report, supra n. 9, at 145.}
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\[\text{182. See David R. Cleveland, Dr. Bloom Goes to Law School, 24 Second Draft 7 (Fall 2010) (explaining formative and summative assessment).}
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\[\text{183. Id.}
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\[\text{184. See supra sec. II(B).}
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\[\text{185. See supra sec. II(C).}
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\[\text{186. See Mueller & Dweck, supra n. 59, at 33–34; see also Rosen, supra n. 13, at 181 (stating that “[n]egative professor feedback, where that feedback promotes a pessimistic attribution style, encourages students to think about themselves through the lens of per-}
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depression and anxiety.\textsuperscript{187} Research suggests that many law students hold a fixed mindset.\textsuperscript{188} Therefore, law professors must carefully address mindset before they can create any successful assessment regime.

While many professors have been providing students with formative assessment for decades,\textsuperscript{189} engaging in dialogue about feedback in conferences,\textsuperscript{190} on listservs, and in academic articles,\textsuperscript{191} and suggesting ways to improve feedback,\textsuperscript{192} the results have not been promising,\textsuperscript{193} and students’ reactions to feedback continue to perplex.\textsuperscript{194}

Many professors have offered solutions to the feedback problem, but these suggestions about improving feedback are wide-ranging and have no unifying theory. The least controversial suggestions are probably those urging professors to give clear and fair critiques.\textsuperscript{195} Some authors suggest changing students’ goal-orientation—from performance to mastery.\textsuperscript{196} One author suggests that giving students more autonomy in the writing process is key to overcoming defensive, disengaged, and unprepared stu-
Students. Others suggest using self-assessments to create better student responses to feedback. Some advocate including positive feedback to help increase students’ self-efficacy, while others recommend peer-review, collaboration, and self-reflection or journaling. Finally, some authors argue that giving students hope, “disciplined optimism,” or a “language of optimism” will promote their adaptive responses to feedback.

While authors continue to propose solutions to the assessment problem, a different problem precedes it—students with a fixed mindset respond to feedback, even when carefully crafted, in maladaptive ways. Therefore, unless we confront the mindset problem, our efforts at designing better assessments will fall short of their intended mark.

As some authors point out, assessments should be fair and accurate. But fair and accurate assessments do not spur learning in the fixed mindset. Like the students wearing the EEG caps, students with a fixed mindset are interested only in where they stand. Did they get it right or wrong? They tend to disengage from the feedback after they get their answer. And no matter how fair the assessment, students with a fixed mindset will not see it that way if their scores do not reflect their fixed perception of their intelligence.

Changing students’ goal orientation requires changing their mindsets first. While performance goals stifle learning and mastery goals increase it, researchers have shown that a students’ mindset significantly predicts a student’s goal choice.

197. Rodríguez, supra n. 9, at 215–218.
198. See e.g. Olympia Duhart & Anthony Niedwiecki, Using Legal Writing Portfolios and Feedback Sessions as Tools to Build Better Writers, 24 Second Draft 8–9 (Fall 2010).
199. See e.g. McKinney, supra n. 195, at 248.
201. See Hemingway, supra n. 156, at 172; Martin & Rand, supra n. 9, at 218.
202. See supra pt. III.
203. Munro, supra n. 9, at 105–110.
205. Id. at 84.
207. Dweck & Leggett supra n. 6, at 266.
208. Id. at 259.
Students with a fixed mindset divert their goals away from learning because they seek to validate their intelligence—a fixed trait. The study with engineering students demonstrates the way fixed-mindset students avoid a learning goal even when they are urged to accept it. In that study, the students were not motivated to learn even after being told that the knowledge being tested was essential for their future jobs as engineers. The students with a fixed mindset chose to prove their competence by taking a test they had already mastered. On the other hand, students with an incremental mindset found it easy to choose a learning goal. Because they believed that their intelligence and competency could increase, they opted to learn something new.

Giving students autonomy in the learning process would probably prove successful for some students. Students with an incremental mindset take on challenging work. They venture into areas where they might struggle but where they believe they will learn. On the other hand, students with a fixed mindset prefer challenge only up to a point. They like challenges that they are pretty sure they can meet without too much effort. But they avoid challenges that seem out of their reach. Simply giving students more autonomy probably will not change whether they use the autonomy to work harder or use it to simply take on less challenging work.

Students with an incremental mindset would probably welcome more self-assessments. They are fairly accurate about their current abilities, and they seek ways to improve them. Probing their own strategies would probably help them learn which strategies worked and which did not. On the other hand, students with a fixed mindset do not hold an accurate view of their abilities. Furthermore, because they believe that their intelligence...
will not change, they remain uninterested in trying new strategies to improve.\textsuperscript{222}

Self-efficacy, motivation, and mindset are a tangled web. Some researchers argue what seems intuitively true—that high self-efficacy motivates students to take on academic challenges.\textsuperscript{223} These researchers advocate helping students set achievable goals because every time students experience success, their self-efficacy will increase as will their motivation to engage in that task in the future.\textsuperscript{224} Researchers have shown, however, that encountering failure or difficulties quickly shatters some students’ self-efficacy.\textsuperscript{225} So while students’ confidence in their abilities keeps them motivated as they are succeeding, failure delivers a heavy blow to these students whose confidence has been trained with achievable successes.\textsuperscript{226}

Although peer review and collaboration arguably give students a better feel for the kind of feedback they will receive once they graduate, it provides no promise in shifting students’ mindsets. Students with a fixed mindset consistently show no interest in learning from their peers.\textsuperscript{227} When given the opportunity to compare themselves with others, they consistently choose to focus on those they out-perform.\textsuperscript{228}

Finally, encouraging students to adopt a more optimistic attitude to increase their academic success does not get to the heart of why students might be optimistic versus pessimistic.\textsuperscript{229} Students that “many students want to defend their work instead of learning from its limitations”).

\begin{thebibliography}{100}
\bibitem{222} Dweck & Molden, \textit{supra} n. 35, at 125.
\bibitem{223} McKinney, \textit{supra} n. 195, at 236.
\bibitem{224} \textit{Id.}
\bibitem{225} Dweck, \textit{supra} n. 34, at 51–52.
\bibitem{226} \textit{See} Dweck & Molden, \textit{supra} n. 35, at 126.
\bibitem{227} Nussbaum & Dweck, \textit{supra} n. 47, at 603.
\bibitem{228} \textit{Id.}: Sergienko, \textit{supra} n. 9, at 483 (noting that some students grade harshly when assessing their peers to increase their own sense of ability).
\bibitem{229} Rosen suggests adopting “the language of optimism” to combat students’ fixed mindsets. \textit{Rosen, supra} n. 13, at 184. However, the Authors have seen no empirical studies linking optimism or pessimism and mindsets. In fact, at least one study found no correlation between optimism/pessimism and mindset when trying to explain whether implicit theories predict participants’ judgment of others. \textit{See} Chiyue Chiu et al., \textit{Lay Dispositionism and Implicit Theories of Personality}, 73 J. of Personality & Soc. Psychol. 19, 28 (1997). Other studies show that the Implicit Theories of Intelligence Scale, used to measure a person’s mindset as fixed or incremental, “does not correlate with optimism about human nature” nor with “a pessimistic or negative view of human nature.” \textit{Id.} at 22, 24 (citing studies validating the scale). It is plausible that students with fixed mindsets could also be optimistic, especially when they are succeeding. The world certainly looks rosy when you are gifted and you find relatively easy success. On the other hand, those with an
ents who believe that feedback increases their intelligence will also remain optimistic in the face of critical feedback. But students who believe that their intelligence is fixed—that nothing can be done to increase it—have nothing to gain from critical feedback but a diminished perception of their own abilities. Because mindset so reliably drives students’ reactions to feedback, effective assessment can only come when students’ mindsets prepare them to react adaptively.

A. Influences on Law Students’ Mindsets.

Law schools are in a position to induce a mindset in their students in ways that could have lasting effects. By nurturing an incremental mindset, law schools will not only lay the groundwork for students to react adaptively to feedback, but will induce a mindset conducive to optimal performance in law school and legal practice.

Instead, though, law students probably struggle to maintain an incremental mindset because the law-school environment almost certainly breeds a fixed mindset. Students experience the fixed mindset as soon as they decide to apply. The Law School Admissions Council (LSAC), the body that administers the Law School Admissions Test (LSAT), suggests that one’s performance on the LSAT is stable and taking an LSAT for a second time is unlikely to improve students’ scores unless illness or anxiety prevents students from performing to their potential during the first test. LSAC clothes its instructions in a fixed-mindset frame-

incremental mindset may also be pessimists. For instance, a person may be pessimistic about the odds of doing well in law school because he or she does not have enough time to spend studying or he or she currently lacks skills that other students have and it would take the student too long to acquire those skills to graduate at the top of the class. Although a “language of optimism” is certainly useful in the classroom for many reasons, based on the research, the Authors believe that professors must explicitly teach students that intelligence grows with effort and persistence rather than giving students generally optimistic feedback in order to ensure that students respond adaptively to any type of feedback.

230. See infra pt. II.

231. See id.

232. See Rosen, supra n. 13, at 176 (pointing out four features of law schools that promote a fixed mindset: ranking of first-year law students, large-firm hiring practices, peer stigmatization, and professors’ feedback).

work: “If your score is a fairly accurate indicator of your ability, it is unlikely that taking the test again will result in a substantially different score. You should also be aware that there is a chance your score will drop.” This statement on LSAC’s website indicates to students that their ability is a fixed entity and a single test score could capture that fixed ability. Furthermore, if students retake the LSAT and substantially improve their scores, LSAC assumes the test-taker was cheating. LSAC’s policy is that if a subsequent score is substantially better than the first, it will review the test taker’s material to ensure that both tests were taken by the same person. Instead of rewarding students for improving an LSAT score, this system questions their integrity when they actually improve.

The perception that the LSAT measures a fixed intelligence is magnified by the fact that a law schools’ ranking is highly correlated to the LSAT scores of its entering class. Not only are students judged by how they perform on a single standardized test, the quality of their law school depends on it as well. This focus on input measures—students’ entering scores—instead of output measures—students’ knowledge and performance when they graduate—has been questioned recently by practitioners and legal educators. The fact that law schools have been fairly slow to

stance, such as illness or anxiety, prevented them from performing as well as they might have expected”); see James D. Gordon III, How Not to Succeed in Law School, 100 Yale L.J. 1679, 1682 (1991) (“The LSAT people say that LSAT preparation courses do not help, since the LSAT tests knowledge and skills that cannot be improved by last minute cramming. Regardless of what the LSAT people say, however, you will notice that there are several suspiciously solvent LSAT prep course companies who are happy to take your money.”).


235. LSAC, supra n. 230 (stating “[u]nusually large score differences are routinely reviewed by LSAC”); LSAC, Score Cancelled by LSAC, http://www.lsac.org/jd/last-cancellation.asp (accessed Sept. 28, 2012) (informing test takers, “LSAC reserves the right to cancel or withhold test scores if . . . [LSAC has any] reason to question” a score’s validity in which case LSAC will “notify[ ] the test taker of the reasons for questioning the score and provide[ ] options appropriate to the specific circumstances”).

236. LSAC, supra n. 233.


238. In a satirical piece on legal education, James D. Gordon III describes how law schools focus only on applicants GPA and LSAT scores in the admissions process. How Not to Succeed in Law School, 100 Yale L.J. 1679, 1684 (1991) (“Law schools have you fill out lengthy application forms which require you not only to provide your GPA and your LSAT score, but also to describe your unique abilities and experiences, and the ways in which you might add to the rich fabric of the law school class. It takes you about eighty hours to fill out each of these forms. It takes you even more time to write and polish and repolish
elevate output measures gives some support to the argument that law schools view students’ intelligence as fixed—if they admit the smartest students, they will graduate the smartest students.

Once accepted to law school, students will encounter another hostile environment for incremental mindsets. Law schools commonly grade on a curve.\textsuperscript{239} This means that the emphasis is on out-performing one’s peers, not mastering the material presented in class.\textsuperscript{240} A grading curve is interpreted by students with a fixed mindset as a statement of how intelligent they are compared to their classmates.\textsuperscript{241} To these students, they are not as smart as other students in the class.\textsuperscript{242}

The way students are tested in most of their doctrinal classes also nurtures a fixed mindset. Traditionally, students’ abilities are evaluated by a single performance on an exam at the end of the semester.\textsuperscript{243} This method assumes that assessments are simply meant as judgment about a student’s ability rather than tool to

\textsuperscript{239} Carnegie Report, supra n. 9, at 165.

\textsuperscript{240} Susan Grover, Personal Integration and Outsider Status as Factors in Law Student Well-Being, 47 Washburn L.J. 419, 426–427 (2008) (claiming that from the first day of law school it becomes clear to law students the rewards of “besting” their classmates); Jolly-Ryan, supra n. 117, at 109 (“Short-term goals, like obtaining rank within the top 10% of the class, a summer associate position at a large law firm, a coveted judicial clerkship, or membership on the law review or moot court board, are the prizes of law school and take precedence over thoroughly learning class material, practicing lawyering skills, or collaborating and communicating with others.”).

\textsuperscript{241} See Butler, supra n. 45, at 975; Barbara Glesner Fines, Competition and the Curve, 65 UMKC L. Rev. 879, 900 (1997) (“For students who have resigned themselves to being losers—‘I'm a C student’—the impact of competitive conditions on motivation is even more pronounced. While grades may in some instances act as carrots, they rarely function well as sticks. When one has an extrinsic orientation toward a task, effort will reflect the extent to which one has assessed his or her relative ability to achieve well on the task. For most students, grading practices of law schools undermine perceptions of ability, with a detrimental impact on task choice and effort.”).

\textsuperscript{242} Gordon, supra n. 233, at 1692 (“Class standing does irreparable psychic injury and scars bright and creative people for the rest of their natural lives. Following law school graduation, it often happens that a bright and creative person is about to do something bright and creative, but then thinks, ‘No, I was only number 67 out of 150 in my class. I’m probably not capable of any mental activity greater than picking slugs off zucchini plants.’ So she doesn’t do anything.”).

\textsuperscript{243} Aizen, supra n. 9, at 765–766 (noting that “no first-year law school practice perplexed me more than the nearly exclusive use of a single end-of-course exam to measure student performance”); Friedland, supra n. 9, at 150 (“Traditionally, student evaluation—meaning the mechanisms, devices, or methodologies for judging a student’s performance or potential—has been embodied in a single final examination at the conclusion of a course.”).
help students learn the material.\textsuperscript{244} This method does not allow students to assess their progress. Without any mid-term exams or papers throughout the semester, the students will have no chance to modify their learning strategies or seek additional help. And even if the professor does make comments on the students’ final assessment, the class is over. The feedback will not help students learn in that class, and, as many professors know, students rarely collect these final papers.\textsuperscript{245}

Although understandable that some students do not perform well during the first year of law school, the environment is not forgiving. First-year grades become indicators of how well the student will continue to do in law school and beyond.\textsuperscript{246} Law firms use class rankings when hiring summer associates with clear instructions to potential applicants that they need not apply if they did not finish in the top portion of the class their first semester.\textsuperscript{247} The grades students receive in the first year of law school can also affect the internships they secure that subsequently affect their career prospects after graduation.\textsuperscript{248} Such a heavily weighted first-year performance can only be explained by a mindset that

\begin{itemize}
  \item \textsuperscript{244} See Nancy B. Rapoport, \textit{Is Thinking Like a Lawyer Really What We Want to Teach?} 1 J. ALWD 91, 97, 99 (2002) (explaining grades on law school exams are supposed to reveal which students are good at “thinking like a lawyer” but exams are not a particularly good way to measure that skill set).
  \item \textsuperscript{245} Gordon, \textit{supra} n. 233, at 1692 (“A few students go and look at their exams after they are graded, but this is a complete waste of time, unless they just want to see again what they wrote and have a combat veteran-type flashback of the whole horrific nightmare. The professors never write any comments on the exams. That might permit you to do better next time, which would upset the class ranking.”).
  \item \textsuperscript{246} Lucile A. Jewel, \textit{Bourdieu and American Legal Education: How Law Schools Reproduce Social Stratification and Class Hierarchy}, 56 Buff. L. Rev. 1155, 1186 (2008) (explaining that class rank serves as the selection process for membership on law review, law school honors and as a gate-keeping mechanism for legal employers; legal employers use class rank to determine who will be interviewed for positions and refuse to consider students who do not meet the cut-off point).
  \item \textsuperscript{247} \textit{Id.}; Roger C. Cramton, \textit{The Current State of the Law School Curriculum}, 33 J. Leg. Educ. 321, 329 (1982) (“First-year grades control the distribution of goodies: honors, law review, job placement, and, because of the importance placed on these matters by the law school culture, even the student’s sense of personal worth.”); Jolly-Ryan, \textit{supra} n. 117, at 109–111 (pointing out that most large law firms and judges only interview students in the top 10 percent of the class, so automatically the other 90 percent of the law students are not competitive enough to be considered for these positions).
  \item \textsuperscript{248} See Jewel \textit{supra} n. 246, at 1186 (declaring “even if a law firm elects to interview students from lower-tiered schools (and many will not), the class rank cut-off point for graduates at lower-tiered schools is significantly lower than where it is for graduates at more prestigious schools. Thus, similar to what occurs with the overall ranking of law schools, the economic value of a law degree will depend on the class rank of the student”).
\end{itemize}
sees ability as something the students have or do not have, not something that can be developed through effort and persistence.

B. Professors’ Mindsets.

Professors’ implicit beliefs about intelligence also shape students’ mindsets.249 The law school classroom, where professors espouse their beliefs on the ability to perform legal analysis and lawyering skills, creates a forum that shapes students’ mindsets. Professors’ mindsets predict the feedback they give.250 For instance, when researchers recorded the type of feedback given to students,251 teachers with a fixed mindset framed feedback in a way that suggests intelligence is fixed sixty-two percent of the time and teachers with an incremental mindset gave effort and incremental orientated feedback eighty-six percent of the time.252 Ability-oriented feedback, even when framed as praise, leads to a fixed mindset and helpless behavior.253 Effort feedback, on the other hand, promotes an incremental mindset and mastery learning goals.254

If law professors are to change students’ mindsets, they must first adopt an incremental mindset themselves, and they must display an incremental outlook in an environment full of fixed messages.

V. SUGGESTIONS FOR FOSTERING AN INCREMENTAL MINDSET

Although the legal community should conduct more specific research into the interaction between law students’ mindsets and responses to assessment and feedback, law professors can begin incorporating findings from other disciplines into their own pedagogy. In fact, professors who teach legal writing are uniquely po-

249. See Lee, Kyunghee, A Study of Teacher Responses Based on Their Conceptions of Intelligence, 31 J. of Classroom Interaction, 1, 9 (1996).
250. Id.
251. Id. at 2. Teachers with a fixed mindset gave no feedback, feedback praising or criticizing abilities, evaluation based on scores, gave direct answers to questions, and commented on non-intellectual aspects of the paper such as neatness of writing. Teachers with an incremental mindset gave feedback emphasizing effort, gave indirect cues for the correct answer, or gave encouragement to the student.
252. Id. at 3.
253. See supra pt. II.
254. See supra pt. II.
sitioned to lead the charge because we often give students their first and most extensive feedback in law school. Our classes are generally designed as an incremental progression taking the student from novice legal writer to a more competent one. The following recommendations, well-established in other fields, will begin to develop an incremental mindset in students despite the fixed environment students may find themselves inhabiting.

A. Consider Your Own Beliefs about Intelligence.

Mindsets are malleable and influenced by the environments in which students exist. Professors contribute to that environment, and they project their mindsets into the classroom and into their interactions with students. If professors believe that students fall into a simple dichotomy of good and bad writers, the classroom and feedback will probably reflect that. If professors believe that some students are more gifted at writing than others, they may be discounting the reasons some students come to class as better writers. These students may have had more writing practice as undergraduate students, they might be more voracious readers, or they simply may have had a life experience that helped them develop writing skills at a faster rate than other students. Students are not simply born better writers than other students—in fact, professors’ own experience at becoming good writers is probably testimony to how much effort is required to write well.

Professors should consider their own beliefs about intelligence. If you are unaware of your own beliefs, take a test. The scale that researchers have used for decades to measure implicit beliefs about intelligence is easily accessible on the internet. If you lean toward a belief that intelligence is fixed, you are more

255. Supra pt. IV.
256. Supra sec. IV(B).
257. See generally Provenzano & Kagan, supra n. 9, at 135 (describing error analysis as contradicting the general belief that basic writing students were ineducable).
258. See id. at 137–138 (asserting novices make errors as necessary stages in the learning process).
259. Dweck, supra n. 32 (containing Dweck’s Implicit Theories of Intelligence Scale); see also Carol S. Dweck, Self-Theories and Goals: Their Role in Motivation, Personality, and Development, in Perspectives on Motivation 207 (Richard A. Dienstbier ed., U. of Neb. Press 1991) (citing studies that use Dweck’s Implicit Theories of Intelligence Scale).
likely to create an environment that induces a fixed mindset in your students.\textsuperscript{260}

Consider adopting an incremental mindset. Read the research on the science of brain development and the research on the effects of harboring a fixed mindset.\textsuperscript{261} Once you adopt an incremental mindset, not only will you reap the rewards in your own work,\textsuperscript{262} but your incremental mindset will permeate the classroom and the feedback you give your students.\textsuperscript{263}

B. Orient Students from Day One.

Orientation offers a unique opportunity to command the full attention of entering students. The first law school experience should also be a time to foster an incremental learning environment. New students are unsure what to expect during law school. Day one is an ideal time to suggest that law school will provide a new challenge that will require persistence and effort.\textsuperscript{264} Students should be introduced to the notion that law school will present new difficulties as students learn new skills, and students will experience a learning curve that many have not experienced before. Professors should remind students that becoming a great lawyer requires time, effort, and the ability to learn from mistakes—there are no exceptions and no shortcuts. Instead, there are faculty members willing to give critical feedback that will help them navigate law school.

\textsuperscript{260} See supra sec. IV(B).


\textsuperscript{262} See also John Cassidy, \textit{Mastering the Machine: Teachings of a Hedge-Fund Guru}, New Yorker 56, 58 (July 25, 2011) (quoting the most successful hedge-fund manager, Ray Dalio, as to why his fund profited in the recent financial crisis: “Our greatest power is that we know that we don’t know and we are open to being wrong and learning”).


\textsuperscript{264} See \textit{e.g.} Gerdy, supra n. 9, at 60 (comparing legal research to learning to ride a bicycle—it is active, takes effort and concentration, and can be hard work).
The first class offers professors time to explicitly teach an incremental mindset. Small group sessions that discuss a short article on how to increase intelligence would help induce an incremental mindset from the outset. The first semester is also a good time to invite former successful graduates who espouse an incremental mindset. A session conducted by a successful graduate who overcame obstacles and failures and continued to learn from them would go a long way toward inspiring students to increase their efforts when their work becomes challenging. Furthermore, graduates who say they make hiring decisions based on applicants’ mindsets would give students immediate incentive to adopt an incremental mindset.

C. Create Incremental and Process-Orientated Assignments.

Legal writing professors can develop writing assignments to help students become incrementally minded. One way to do that is to focus on process rather than product. Many writing professors already take a process approach—developing assignments that build on each other so that students are moving from basic analysis and writing to more advanced. Additionally, the assignment grade is weighted towards the student’s final version. These methods, combined with an explicit focus on process, help students see that they are not expected to simply arrive at law school as good legal writers. They must develop their skills through hard work and lots of practice.

Professors in educational psychology suggest that a mastery climate is enhanced by providing a check-list of skills that will be learned in the class. Showing students how far they have advanced and how many new skills they have learned over the course of the semester can also induce an incremental outlook.

265. Professors might assign one or more chapters from Dweck’s Mindset: The New Psychology of Success, supra n. 8, or any number of shorter articles or interviews about mindset or about the way the brain changes as we learn.

266. See Colvin, supra n. 48, at 47–48 (noting that General Electric, a company consistently rated number one among recruiters, does not even put intelligence on the list of traits it looks for when hiring employees). According to Michael Lynn, a successful partner in a Dallas law firm, the firm hires lawyers who have overcome difficulty in their lives, and they see failure as something to celebrate for the learning opportunities it provides. Interview with Michael Lynn, Partner at Lynn Tillotson Pinker Cox, Dallas, Texas (June 20, 2011).

Providing this checklist directly in the syllabus makes explicit the skills that students are expected to master. A skills checklist in the course syllabus provides students a tangible way to monitor their progress. They will become aware of the new skills they have developed and understand the effort it took to master them.

In addition to conveying that good legal writing is a process that develops over time, students also need feedback about how to manage the learning process on their own. Because increasing one’s intelligence depends on using better strategies, professors should focus on students’ strategies when providing feedback. Many professors have already developed assignments that help them assess students’ strategies by asking students to show each step of their research and writing process either through charting268 or journaling.269

Self-evaluation forms also provide a way to convey the learning process and the students’ role in it. For example, the Authors developed the following instructions for students’ in our law schools’ externship program. The instructions attempt to frame the uncertainties and challenges of externships as opportunities to develop as lawyers. These instructions, of course, could be adapted to other educational settings. Included within the students’ self-evaluation form are the following two paragraphs:

In your externship, you will be asked to research areas of law you may not know anything about. You may be asked to write about legal issues in a format you haven’t used before. You may also be asked to brief a lawyer or a judge orally about your thoughts on a case—again, something you probably have not practiced. By acceptance into the extern program, we know you have the ability to succeed in this new legal environment. We also know that some assignments will be especially challenging for you because you will have to apply some of the skills you learned in the past to new and different circumstances, sometimes with little or no guidance.

269. See supra n. 200.
This evaluation form should help you through the process of mastering the kinds of skills you will need to become a successful lawyer. The purpose of this evaluation is to reflect on what tasks came easily to you and what tasks you found more difficult to master. Begin by filling out this evaluation form after completing any written assignment you have been given. When you have worked through a difficult task and completed an assignment that you were either uncertain about or you think you could have done a better job, make an appointment with your externship supervisor to discuss your work. Before meeting with your supervisor you should make a list of the strategies you used to complete the task and be prepared to share them with your supervisor. This form is to help your supervisor see where to provide feedback that will help you develop as a lawyer. Ask for critical feedback when you meet with your supervisor. The time spent with your supervisor and this evaluation form will be one of the most valuable experiences of your externship—when your supervisor is sharing the highly adaptive strategies he or she mastered through years of experience.270

Instead of simply sending students out into a sometimes difficult climate where they could get easily discouraged, this form gives students a mindset that critical feedback is the way one learns the strategies that will make them successful later on. It also gives the student and the supervisor a method of evaluation—one that focuses on the student’s strategies. When the student notes her strategy, the feedback can center on whether the strategy was effective and whether the student should explore other strategies. This discussion focuses on the student’s controllable processes rather than a judgment on her final product, a method that provides the student with a belief that improvement is within her control.

D. Give Mindful Feedback That Creates an Incremental Mindset.

Researchers have demonstrated that praising students for their ability contributes to a fixed belief of intelligence.271 Students may interpret praise about their ability or performance,

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271. See Mueller & Dweck, supra n. 59, at 40.
such as “you’re really good at answering questions in class” or “you’re a talented writer,” as evidence that they hold some special gift or fixed trait. Ability praise leads to students’ reduced efforts, and when students receive critical feedback, it leads them to believe they are not as gifted as they thought.

Instead of praising students for ability, feedback should praise students for their efforts and strategies, for example, “Your extensive preparation means that you can answer questions intelligently in class,” or “Your hard work on your pre-writing organization really paid off.” Effort and strategy use are controllable. If students are praised for effort and strategy use after a good performance, they will be inclined to use the same effort and strategies for future tasks. Similarly, critical feedback can be framed in a way that allows students to retain control. Although students experience disappointment after critical feedback, they can increase their effort or change strategies to improve their work in the future. For example, professors may tell students with deficient grammar and punctuation that these skills are only one component of good writing, but a very important component. Only by learning the rules of grammar and punctuation—like learning the rules of contract—will they succeed in legal writing. They can improve their skills by reading style manuals, doing exercises designed to improve their writing, and perhaps even seeking the additional help of a writing center or personal tutor. This kind of feedback will help develop an incremental mindset and belief that intelligence can grow, but only with focused effort.

Experts in educational psychology suggest feedback that focuses on effort, that gives students clues to solve problems on

272. Id. at 37.
273. Dweck & Molden, supra n. 35, at 125 (noting that “students with an entity theory see setbacks as a sign of deficient ability: ‘I wasn’t smart enough’”).
274. Id. at 36. Many legal writing professors have voiced discomfort about commenting on a student’s effort for fear that the student actually did put forth significant effort without the corresponding result. See Enquist, supra n. 159, at 1142. However, professors should attempt to discover what types of efforts the student made. Were the strategies inefficient? Are there better strategies the student can incorporate on the next assignment? Without inquiring about a student’s effort, a professor cannot understand where and how to intervene.
275. Ying-yi Hong et al., supra n. 38, at 596.
276. Id.
277. Id.
their own, and that encourages students to persist.278 Here are some comments that incorporate the effort-clues-encouragement strategies designed to influence students’ mindsets:

- This is a good start with your facts section. You have listed all of the relevant facts. In order to gain credibility with the reader, you will need to accurately cite each fact in proper ALWD form. It does take time, but your attention to detail will pay off in the end.

- You’ve identified the issue and the relevant cases, but you should spend more time reading the cases carefully. Does Jones really hold this or is it simply dicta? You will often need to read cases several times to really understand how they fit into your analysis. But once you understand the cases on a deeper level, your writing will also improve.

- This is a well-organized draft of your legal memo. You’ll need to concentrate on grammar and punctuation for the final version. Grammar and punctuation aren’t simply matters of personal choice, they follow rules that good writers must know. Spend lots of time with your style manual. Complete the practice exercises. Then return to your memo and begin the process of editing. Make sure to give yourself at least a day to edit. Good lawyers write with flawless grammar and punctuation. You will too once you’ve taken the time to master that aspect of legal writing.

Of course, professors don’t always know how much effort a student gave any particular assignment, and assessing students’ strategies after the fact is difficult. That is why professors should

278. See e.g. Kyunghee Lee, A Study of Teacher Responses Based on Their Conceptions of Intelligence, 31 J. of Classroom Interaction 1, 3 (1996) (demonstrating that teachers with an incremental mindset give effort-orientated feedback and entity teachers give ability-oriented feedback and stating that “teachers who view intelligence in an entity-oriented way should be advised to become more aware of the potential dangers” of an entity orientation); Deborah J. Stipek et al., Teachers’ Beliefs and Practices Related to Mathematics Instruction, 17 Teacher & Teacher Educ. 213, 214 (2001) (citing the National Council of Teachers of Mathematics standard that encourage teachers to “use assessment strategies that focus on understanding rather than right answers,” should “value and reward students’ efforts and persistence,” and encourage students to “use a variety of approaches to mathematical tasks”).
focus feedback on students’ processes and not just their end product. Process-oriented feedback is incremental feedback because it assumes that everything is a work in progress and that professors do not expect students to get it right the first time.

E. Create a Mastery-Focused Environment.

Mastery-focused learning environments will contribute to students adopting an incremental mindset. A mastery-focused environment encourages effort and growth over performance and emphasizes problem solving while limiting students’ comparisons to other students. Likewise, in the law school setting, a mastery focused classroom constantly reminds students that legal analysis is a process that can be mastered, but only with effort and practice, and that performance on a single assignment is not an indication of future ability.

Legal writing professors have a unique opportunity to create an environment conducive to incremental mindsets. They are experts at narrative—persuading through good storytelling. The stories professors tell about how they became better writers, how former students excelled after failure, or even how Supreme Court justices continue to struggle through the writing process should have a profound effect on how first-year law students see their role in the learning process. Stories of people who have been successful in the field of law provide students who want to emulate that success with a pathway and a method for reaching their

279. One example comes from Steve Johansen. He requires his students to use comment bubbles in their assignments to explain their process as they write. Interview with Steve Johansen, Prof. of L., Lewis & Clark L. Sch. (July 10, 2011); see also Provenzano & Kagan, supra n. 9, at 141–143 (explaining the legal writing Professors are moving toward process-oriented teaching to “move students up the analytical learning curve”); Venter, supra n. 9, at 634 (suggesting that students will “process their thoughts [more] effectively,” if students are conscious of the “thought process in the act of writing”).

280. See Ommundsen, supra n. 47, at 152.


282. See e.g. Ruth Anne Robbins, An Introduction to Applied Storytelling and to this Symposium, 14 Leg. Writing 3, 3 (2008).

283. For example, Bryan Garner’s interviews with United States Supreme Court justices provide a window into the mindset of highly successful legal writers. Many of the interviews discuss the amount of time and effort the justices must spend to perfect their writing. Law Prose, Interviews, Supreme Court, http://www.lawprose.org/interviews/supreme-court.php (accessed Apr. 21, 2013).
goals. These stories also help dispel students of the myth that success is based on innate gifts rather than effort and persistence.

Professors can further the mastery-focused environment by inviting attorneys into the classroom—attorneys with incremental mindsets who can talk about overcoming their writing deficiencies or about the importance of being able to learn from failure in the practice of law. Professors have a rich set of examples at hand to demonstrate that writing does not come easily even for the best writers. Great writers constantly confess that they suffer from writer’s block, that they struggle mightily with their writing, and that they continue to learn from editors and other writers. Professors should provide students with role models of the incremental mindset and repeat these messages throughout the semester.

F. Provide Incremental-Minded Mentors for Incoming Students.

Mindset interventions have shown that incremental mindsets can be induced.\textsuperscript{284} However, researchers were concerned that these interventions—typically having students simply read a paragraph or short article about how intelligence increases throughout life—would not have lasting effects.\textsuperscript{285} Students, they feared, would soon return to their old mindset.\textsuperscript{286} Researchers at Stanford showed that by using a mentoring model, mindset interventions can have long-lasting effects and can significantly change students’ performances.\textsuperscript{287} The study followed Stanford undergraduate students.\textsuperscript{288} The students were assigned to one of three groups and were told they were participating in a pen-pal program mentoring young, at-risk students (but these students did

\textsuperscript{284} See e.g. Kathleen C. Burns & Linda M. Isbell, Promoting Malleability Is Not a One Size Fits All: Priming Implicit Theories of Intelligence as a Function of Self-Theories, Self & Identity 51, 55 (2007) (demonstrating that simply having participants read a passage about the nature of ability would significantly predict preference for undertaking difficult tasks and noting that this is an attribute of an incremental mindset); Chiyue Chiu et al., Lay Dispositionism and Implicit Theories of Personality, 73 J. of Personality & Soc. Psychol. 19, 26–27 (1997) (demonstrating that exposing participants to a short article intended to induce an entity- or incremental-mindset significantly determined whether participants adopted the behavior of the mindset the article intended to induce).

\textsuperscript{285} Aronson et al., supra n. 49, at 116.

\textsuperscript{286} Id.

\textsuperscript{287} Id. at 123.

\textsuperscript{288} Id. at 117.
not actually exist). The researchers, posing as fictitious mentees, wrote to their mentors expressing difficulties they were experiencing at school. Mentors in the control pen-pal condition responded to the students from a script, telling the students there are many different types of intelligence and not everyone is good at the same thing. However, mentors in the incremental mindset group responded from this script:

Because intelligence is malleable, humans are capable of learning and mastering new things at any time in their lives. This message is especially important to get across to young, struggling students. If these students view intelligence as a fixed quantity, they may feel that they are incapable of learning if they encounter difficulty with their school work. If, however, students can be convinced that intelligence expands with hard work, they may be more likely to remain in school and put effort into learning.

When assessed for mindset, the mentors in the incremental pen-pal condition reported a significantly higher belief than the other mentors that intelligence is malleable. And nine weeks after completing the intervention, researchers compared the semester GPAs of the participants. Mentors in the incremental pen-pal condition increased their GPA significantly more than the participants in the control group. The researchers were especially interested in establishing whether induced mindsets hold over time, so almost one year after completion of the study, they again assessed the participants’ mindsets. The students acting as mentors in the incremental pen-pal condition still scored significantly more incremental on the mindset measure than the other participants, but the difference had actually increased. Simply explaining to others that intelligence is malleable signifi-

289. Id. at 116.
290. Id. at 117.
291. Id. at 118.
292. Id. at 117–118.
293. Id. at 119.
294. Id. at 121.
295. Id.
296. Id. at 119.
297. Id.
cantly affected the mindsets of students participating in the study.\footnote{298 Id. at 123.}

Like the Stanford mindset intervention study, mentors with an incremental mindset and an incremental message would almost certainly help the mentors and mentees alike. Most legal writing professors have an opportunity to put the mentoring idea into practice in their own classrooms. Many writing professors hire teaching assistants who often act as advisors to students in research, writing, and other law school issues like how to prepare for exams. When hiring teaching assistants, professors might focus on students who have overcome early difficulties in their writing. Hiring teaching assistants based on how much their writing improved over the course of a year demonstrates that we value the learning process rather than some innate ability that certain students possess. Teaching assistants who overcame perceived failures will also have good stories to tell the incoming students about their own struggles and how they refocused their efforts to eventually succeed.

Although teaching assistants may have demonstrated an incremental mindset in class, they will not be as effective in changing students’ mindsets unless they are educated about the role mindsets play in the learning environment. Make sure your teaching assistants read literature that supports the proposition that we can all significantly increase our intelligence over time and that mindsets play a significant role in our motivations to learn and to accept critical feedback. In fact, prepare a script for your students to use when emailing or talking to students. Give them the tools to induce an incremental mindset.

\textbf{VI. CONCLUSION}

Educational psychologists have repeatedly demonstrated that students’ beliefs about intelligence reliably predict their responses to feedback and assessment. Currently, no research has been conducted with law students—but until this is done, there is sufficient evidence to suspect that law students will respond as predictably as students in other disciplines.

The legal writing community is in a unique position. Legal writing professors currently give students more feedback than
other professors in the law school setting and, as a consequence, realize that the same feedback does not yield the same responses from all students. Students’ beliefs about intelligence predict these varied responses. Mindset gives legal writing professors a way to understand their students’ responses to feedback. Furthermore, understanding mindset empowers legal writing professors to reach more students by creating an incremental learning environment and giving incremental feedback. Inducing an incremental mindset in law students will help them in their law school career and beyond. An incremental belief about intelligence will arm them with the mindset to navigate the challenges and setbacks every successful lawyer must endure.