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## ANTICIPATING THE NEEDS OF FUTURE LAW STUDENTS BASED ON CURRENT POST- PANDEMIC NATIONAL READING COMPREHENSION TEST SCORES

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“Someone’s sitting in the shade today because someone planted a tree a long time ago.”<sup>2</sup> Preparing for the needs of future law students is something all law schools should be doing. How do we anticipate those needs? The reading comprehension scores from the 2022-23 National Assessment of Educational Progress (“NAEP”), also known as “The Nation’s Report Card,” could be one potential indicator.<sup>3</sup> In short, the results of the reading comprehension tests are disappointing, showing scores as low as those in the early 1990s, which is a

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<sup>2</sup> ANDREW KILPATRICK, OF PERMANENT VALUE: THE STORY OF WARREN BUFFETT 802 (1998) (quoting a statement made by Warren Buffett to NewsInc. in January 1991).

<sup>3</sup> 2022–2023 Long-Term Trend (LTT) Mathematics and Reading Assessments at Ages 9 and 13, THE NATION’S REP. CARD, <https://www.nationsreportcard.gov/> (last visited Dec. 4, 2023).

significant backslide in students' educational progress.<sup>4</sup> When reading comprehension skills are weak, critical reading and thinking skills also diminish because of the close link between comprehension and critical reading and thinking. The students who took the reading comprehension tests in 2023 in elementary, middle, and high schools could enter law schools beginning as early as 2027 if they are in high school or 2037 for current elementary school students. Suppose law schools plan and plant the tree now to anticipate future law students' critical reading and thinking needs. In that case, prospective law students will be more comfortable starting law school and will be more successful law students and, eventually, future lawyers.

The first section will discuss the meaning of reading comprehension, critical reading, and critical thinking. Then, it will examine the connection between reading comprehension, critical reading, and critical thinking, which are necessary skills for law students. The second section will detail the kinds of national test scores and the most recent results of tests and studies. It also will compare historical and current data, particularly regarding the category of reading comprehension. Next, the third section will discuss the potential impact of decreased test scores on future law students' critical reading and thinking skills. Finally, the last section will discuss a remedial analysis and writing class that I have taught and ideas on how to turn that remedial instruction into a more comprehensive instruction if deficient reading and thinking skills diminish in the future, as indicated by current testing.

## I. READING COMPREHENSION AND ITS RELATION TO CRITICAL READING AND CRITICAL THINKING

Distinct definitions exist for reading comprehension, critical reading, and critical thinking. Nevertheless, these three concepts are closely related. This section will first define each concept: reading comprehension, critical reading, and critical thinking. For each definition, the term will be connected to the

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<sup>4</sup> *Scores Decline in NAEP Reading at Grades 4 and 8 Compared to 2019*, THE NATION'S REP. CARD, <https://www.nationsreportcard.gov/highlights/reading/2022/> (last visited Dec. 4, 2023).

legal academy. A discussion of the relationship between these skills will conclude this section.

## A. READING COMPREHENSION

Comprehension is generally defined as understanding information.<sup>5</sup> In the context of reading, comprehension is understanding what is read.<sup>6</sup> Reading is defined in the Handbook for Reading Research as “interpreting and extracting meaningful information from written text.”<sup>7</sup> Vocabulary, word recognition, and grammatical knowledge are relevant factors for interpreting and extracting meaningful text.<sup>8</sup> Readers must “decode” information, including knowing the meaning of individual words. Then, readers must put those words together to understand individual sentences and how those sentences relate to each other.<sup>9</sup> Therefore, readers must be able to “decode the written words,” which requires readers to “use their

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<sup>5</sup> *Comprehension*, MERRIAM-WEBSTER DICTIONARY, <https://www.merriam-webster.com/dictionary/comprehension> (last visited Dec. 4, 2023) (listing definitions of “comprehension” as including “the act or action of grasping with the intellect,” “knowledge gained by comprehending,” and “the capacity for understanding fully”).

<sup>6</sup> Mawaddah Hidayati et al., *The Correlations Among Critical Thinking Skills, Critical Reading Skills, and Reading Comprehension*, 9 J. ENG. EDUC. 69, 70 (2020) (explaining that reading comprehension “is a cognitive process of making meaning from text”).

<sup>7</sup> Laura K. Allen & Danielle S. McNamara, *Defining Deep Reading Comprehension for Diverse Readers*, in HANDBOOK OF READING RESEARCH VOLUME V, Chapter 14, at 261 (Elizabeth Birr Moje et al. eds. 2020). See also Peter Dewitz, *Legal Education: A Problem of Learning from Text*, 23 N.Y.U. REV. L. & SOC. CHANGE 225, 225 (1997) [hereinafter Dewitz, *Legal Education*] (defining “reading” as “the product of word recognition and comprehension”). Word recognition simply includes recognizing “letters, sounds, word parts, whole words, and contextual constraints,” which for many is “automatic.” *Id.* at 226. Comprehension is “the process of building a mental representation of the ideas expressed by the author.” *Id.*

<sup>8</sup> See Allen & McNamara, *supra* note 7, at 261-62 (word recognition and vocabulary); Dewitz, *Legal Education*, *supra* note 7, at 225 (word recognition and grammatical knowledge).

<sup>9</sup> Allen & McNamara, *supra* note 7, at 261-62.

knowledge of letter sounds to pronounce printed words,” and then readers must “understand the sentences in a text as well, as the relationships among the sentences.”<sup>10</sup> Reading comprehension includes understanding the text rather than merely isolating certain words or sentences.<sup>11</sup> In the legal field, word recognition and vocabulary would relate to the reader’s repertoire of legal terminology<sup>12</sup> so that readers can understand individual words within the sentences that they read. Further complicating legal reading is the problem that “the grammar . . . can become so complex that the reader has to work hard to understand how the sentences fit together.”<sup>13</sup>

Other important factors for reading comprehension are “prior knowledge” and “working memory.”<sup>14</sup> “What readers know determines what they will comprehend.”<sup>15</sup> In an explanation about reading legal sources, Professor Peter Dewitz explained that “the most important factor that affects comprehension ability is the knowledge that the reader brings to the page.”<sup>16</sup> Prior knowledge can mean several things. Knowledge can include “real world knowledge”<sup>17</sup> based on a person’s experiences. In the legal field, this real-world knowledge could consist of general information the reader knows in terms of a substantive area of the law or legal theory.

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<sup>10</sup> *Id.* at 262.

<sup>11</sup> Hidayati et al., *supra* note 6, at 70 (providing that, with reading comprehension, “[t]he goal . . . is to gain an overall understanding of what is described in the text rather than to obtain meaning from isolated words or sentences”).

<sup>12</sup> Leah M. Christensen, *Legal Reading and Success in Law School: An Empirical Study*, 30 SEATTLE U. L. REV. 603, 604 (2007).

<sup>13</sup> *Id.* at 607-08.

<sup>14</sup> Allen & McNamara, *supra* note 7, at 261; Dewitz, *Legal Education*, *supra* note 7, at 226; Kirk W. Junker, *What Is Reading in the Practices of Law?*, 9 J. L. SOC’Y 111, 123-24 (2008).

<sup>15</sup> Dewitz, *Legal Education*, *supra* note 7, at 226; Peter Dewitz, *Reading Law: Three Suggestions for Legal Education*, 27 U. TOL. L. REV. 657, 658 (1996) [hereinafter Dewitz, *Reading Law*].

<sup>16</sup> Dewitz, *Reading Law*, *supra* note 15, at 657; Dewitz, *Legal Education*, *supra* note 7, at 226.

<sup>17</sup> Dewitz, *Legal Education*, *supra* note 7, at 226.

Knowledge also includes “text structure” knowledge.<sup>18</sup> This second kind of knowledge involves some understanding of the text’s structure, such as the text’s organizational structure.<sup>19</sup> For instance, in the legal context, when law students read case books, text structure knowledge could include understanding how those books are organized.<sup>20</sup> Similarly, court opinions have a typical organizational structure, so law students who understand the structure of those opinions will find and understand key information more efficiently.<sup>21</sup> Additional knowledge is “strategic knowledge,” which refers to a “set of mental processes used by a reader to achieve a purpose.”<sup>22</sup> A strategy relates to readers working through text in an “evaluative manner” where they consider what they read compared to their prior experiences.<sup>23</sup> Combining these kinds of knowledge in the context of the reading that lawyers do, “[c]omprehending legal text requires knowledge of legal terminology and an understanding of both case structure and legal theory.”<sup>24</sup>

In sum, reading is not a passive process. To effectively read and comprehend text, the reader must engage actively with the text. Reading comprehension is merely the first stage of the reading process.<sup>25</sup> Next, readers must begin to critically

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<sup>18</sup> Dewitz, *Reading Law*, *supra* note 15, at 658; Dewitz, *Legal Education*, *supra* note 7, at 227.

<sup>19</sup> Dewitz, *Legal Education*, *supra* note 7, at 227 (explaining that “[t]ext structure knowledge is the map readers follow to locate and focus on important information”); Christensen, *supra* note 12, at 607 (stating that “[c]omprehension proceeds more smoothly if the reader understands the organizational structure of the text”).

<sup>20</sup> Dewitz, *Legal Education*, *supra* note 7, at 227.

<sup>21</sup> Dewitz, *Legal Education*, *supra* note 7, at 227-28; Dewitz, *Reading Law*, *supra* note 15, at 658-59.

<sup>22</sup> Dewitz, *Legal Education*, *supra* note 7, at 228; Dewitz, *Reading Law*, *supra* note 15, at 659.

<sup>23</sup> Christensen, *supra* note 12, at 610. *See also* Junker, *supra* note 14, at 126.

<sup>24</sup> Christensen, *supra* note 12, at 604.

<sup>25</sup> *See* Carolyn V. Williams, #CriticalReading #WickedProblem, 44 S. ILL. U. L. J. 179, 188 (2020) (“reading comprehension is a necessary predicate for critical reading”).

and actively read for even deeper understanding and evaluation.

## B. CRITICAL READING

Critical reading goes beyond comprehension because readers must go beyond mere understanding. Critical reading involves “learning to evaluate, draw inferences, and arrive at conclusions based on evidence.”<sup>26</sup> Critical readers “analyze the authenticity, effectiveness, and value of the text or various information he or she reads based on certain principles or standards and then make evaluations through appropriate judgments.”<sup>27</sup> When conducting ordinary reading, readers do not show much “initiative,” but instead, “accept and concur” with the text.<sup>28</sup> However, “critical readers reflect on what the text *does*: Is it criticizing a practice? Arguing for a particular point of view? Offering examples?”<sup>29</sup> Essentially, critical reading is thinking while reading.<sup>30</sup>

In the legal academy, there is an increasing recognition that teaching critical reading is necessary, as students do not necessarily come to law school with this skill.<sup>31</sup> Reading in law

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<sup>26</sup> Jane Bloom Grise, *Critical Reading Instruction: The Road to Successful Legal Writing Skills*, 18 W. MICH. U. COOLEY J. PRAC. & CLINICAL L. 259, 261 (2017) (citing Norma Decker Collins, *Teaching Critical Reading Through Literature*, 1993 ERIC DIG. 2 (1993) (<https://files.eric.ed.gov/fulltext/ED363869.pdf>)); Williams, *supra* note 25, at 183.

<sup>27</sup> Min Liao & Kai Tian, *Critical Information Literacy Education Strategies for University Students in the Post-Pandemic Era*, 6 J. OF CONTEMP. EDUC. RSCH. 106, 109 (2022).

<sup>28</sup> *Id.*

<sup>29</sup> Williams, *supra* note 25, at 183.

<sup>30</sup> Debra Moss Curtis & Judith R. Karp, “*In a Case, In a Book, They Will Note Take a Second Look!*”: *Critical Reading in the Legal Writing Classroom*, 41 WILLAMETTE L. REV. 293, 296 (2005) [hereinafter *In a Case, In a Book*]; Williams, *supra* note 25, at 184 (“Expert critical readers’ use of metacognition—thinking about thinking—is crucial to their success.”).

<sup>31</sup> Williams, *supra* note 25, at 186 (explaining that “numerous scholars” agree that a “shortfall” exists in students’ critical reading skills despite the lack of empirical research supporting that fact). *See also* Kari Mercer

school is complicated, in part, because it is significantly different than reading in other areas because case books are the primary tool for reading and learning.<sup>32</sup> Law students must read the multitude of court opinions in the case books to extract rules and reasoning without an “explicit description of how the main ideas fit together.”<sup>33</sup> Students must decipher vast information independently, but cannot do so if they lack critical reading skills. For students who lack these critical reading skills coming into law school, their depth of reading is more at a novice level than at an expert level.

Another significant difference with reading in law school as compared to other kinds of reading is the nature of engagement that readers must use in understanding and evaluating text. Specifically, law “students need to examine what they read and understand its relationship to prior readings as well as its impact on current and future problems.”<sup>34</sup> Reading must be done “with vigor and with accuracy,” and readers must examine the words and context of those words as well as “challeng[e] assumptions [and] find[]

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Dalton, *Their Brains on Google: How Digital Technologies are Altering the Millennial Generation’s Brain and Impacting Legal Education*, 16 SMU SCI. & TECH. L. REV. 409, 434 (2013) (“Professors must take an interest in teaching reading skills, despite the fact that law professors often feel that reading is a skill students should have already acquired. . . . This means we need to teach students how to evaluate, draw inferences, and arrive at conclusions based on evidence while they read.”).

<sup>32</sup> See Dewitz, *Legal Education*, *supra* note 7, at 227. See also Mary A. Lundeberg, *Metacognitive Aspects of Reading Comprehension: Studying Understanding in Legal Case Analysis*, 22 READING RSCH. Q. 407 (1987). Professor Lundeberg conducted a study of reading strategies used by lawyers and law professors. The discipline of law was chosen because law professors claim to not teach rules, “but rather, to teach students how to think like lawyers.” *Id.* at 409. Students must reason, using cases as “their primary instructional material.” *Id.* Professor Lundeberg recognized the complexity of reading cases, which is difficult for new law students, especially because students “are not given instruction in case reading.” *Id.*

<sup>33</sup> Williams, *supra* note 25, at 205.

<sup>34</sup> Patricia Grande Montana, *Bridging the Reading Gap in the Law School Classroom*, 45 CAP. U. L. REV. 433, 445 (2017).

patterns.”<sup>35</sup> Therefore, critical reading is more than mere reading comprehension because legal readers must do more than “read for the gist or general meaning of a text.”<sup>36</sup>

Expert legal readers and novice legal readers exhibit differences.<sup>37</sup> Expert readers use several strategies in reading legal text, including (1) putting the court opinion in “context” by looking at the headings, parties, court, and date; (2) conducting an “overview” of the opinion by “preview[ing] the decision, the length of the case, the actions taken, and the facts”; (3) conducting “synthesis” where the readers used the strategy of “cohesion (a merging of relevant facts, issue, rule, and rationale), and spontaneously generating hypotheticals”; and (4) “evaluat[ing]” the opinion by thinking about whether they agreed the judge’s decision and “showing a sophisticated view of” the reasoning.<sup>38</sup> On the contrary, novice readers do not exhibit all these characteristics.<sup>39</sup> Based on this research, suggestions for teaching critical reading have emerged. These suggestions are primarily based on following the steps used by

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<sup>35</sup> *Id.*

<sup>36</sup> *Id.* at 446.

<sup>37</sup> Lundeberg, *supra* note 32, at 417; Laurel Currie Oates, *Beating the Odds: Reading Strategies of Law Students Admitted Through Alternative Admissions Programs*, 83 IOWA L. REV. 139, 158-60 (1997) [hereinafter Oates, *Beating the Odds*]; Christensen, *supra* note 12, at 203-07; Dewitz, *Legal Education*, *supra* note 7, at 230-35.

<sup>38</sup> Lundeberg, *supra* note 32, at 412-15. See generally Laurel Currie Oates, *Leveling the Playing Field: Helping Students Succeed by Helping Them Learn to Read as Expert Lawyers*, 80 ST. JOHN’S L. REV. 227, 228-29 (2006).

<sup>39</sup> Lundeberg, *supra* note 32, at 417. See also Debra Moss Curtis & Judith R. Karp, *In a Case, On the Screen, Do They Remember What They’ve Seen? Critical Electronic Reading in the Legal Writing Classroom*, 30 HAMLIN L. REV. 247, 276 (2007) (“Expert critical readers: (1) recall prior knowledge and mentally connect new information with that knowledge as they read; (2) monitor and repair comprehension by rereading and skipping ahead; (3) analyze text to determine important ideas before, during and after reading; (4) summarize and synthesize to check comprehension; (5) draw inferences from prior knowledge and text to fill in the gaps; and (6) ask and answer questions while reading to check comprehension, clarify ideas and focus attention.”).



expert readers.<sup>40</sup> In fact, publishers have also published textbooks to help professors more easily address weak critical reading skills in the law school classroom.<sup>41</sup>

Like reading comprehension, critical reading is an active process that requires sophisticated reading techniques. Unlike reading comprehension, critical reading surpasses mere understanding of what is read. Instead, when engaging in critical reading, readers are thinking while they are reading.

### C. CRITICAL THINKING

Critical thinking is a term that has multiple definitions, depending on which research is reviewed. A summary of the various definitions includes the following:

- “an ‘intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, [] or evaluating information’”;
- “problem solving in situations where ‘solutions’ cannot be verified empirically”; and
- “questioning knowledge.”<sup>42</sup>

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<sup>40</sup> Lundeberg, *supra* note 32, at 412-15; Oates, *Beating the Odds*, *supra* note 37, at 148; Christensen, *supra* note 12, at 646; Dewitz, *Legal Education*, *supra* note 7, at 230-35; Nelson P. Miller & Bradley J. Charles, *Meeting the Carnegie Report’s Challenge to Make Legal Analysis Explicit – Subsidiary Skills to the IRAC Framework*, 59 J. LEGAL EDUC. 192, 196-98 (2009).

<sup>41</sup> RUTH ANN MCKINNEY, *READING LIKE A LAWYER: TIME-SAVING STRATEGIES FOR READING LAW LIKE AN EXPERT* (2d ed. 2012); JANE BLOOM GRISÉ, *CRITICAL READING FOR SUCCESS IN LAW SCHOOL AND BEYOND* (2d ed. 2022).

<sup>42</sup> Barbara A. Kalinowski, *Logic Ab Initio: A Functional Approach to Improve Law Students’ Critical Thinking Skills*, 22 J. LEGAL WRITING INST. 109, 110 (2018). *See also* Nick James & Kelley Burton, *Measuring the Critical Thinking Skills of Law Students Using a Whole-of-Curriculum Approach*, 27 LEGAL EDUC. R. 1, 3-4 (2017) (explaining that “[c]ritical thinking has been defined variously as ‘the propensity and skill to engage in an activity with reflective s[k]epticism’; ‘purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation,

Critical thinking exceeds merely memorizing information, regardless of the definition used. Critical thinking entails deeper analysis and evaluation of the learned and memorized information. It is required to be able to solve problems.<sup>43</sup>

In the legal context, critical thinking has been defined “as careful and thoughtful questioning of a legal statement, claim, argument, decision, position or action according to an explicit set of criteria or standards.”<sup>44</sup> When implementing critical thinking, lawyers must do more than read and understand a legal rule. They also must analyze the rule’s meaning, identify additional information that is needed to understand a legal issue, evaluate the rule’s accuracy and application to a client’s situation, identify the most applicable rules to use in a given scenario, and synthesize those rules to have a fully informed course of action for a client.<sup>45</sup>

More specifically, law students who exhibit critical thinking skills typically have several common characteristics. They “[a]cknowledge personal limitations,” “[s]ee problems as exciting challenges,” “[h]ave understanding as a goal,” “[u]se evidence to make judgments,” “[a]re interested in others’ ideas,” “[a]re skeptical of extreme views,” “[t]hink before acting,” “[a]void emotionalism,” “[k]eep an open mind,” and

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and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based’; and ‘a commitment to using reason in the formulation of our beliefs’”); Lisa Gueldenzoph Snyder & Mark J. Snyder, *Teaching Critical Thinking and Problem Solving Skills*, 50 DELTA PI EPSILON J. 90, 90 (2008) (listing some critical thinking definitions as “the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action,” “metacognition,” and “thinking about thinking”).

<sup>43</sup> James & Burton, *supra* note 42, at 2; Snyder & Snyder, *supra* note 42, at 90 (“Simply put, students who are able to think critically are able to solve problems effectively. Merely having knowledge or information is not enough.”).

<sup>44</sup> James & Burton, *supra* note 42, at 4.

<sup>45</sup> *Id.* at 2. See generally Kurt M. Saunders & Linda Levine, *Learning to Think Like a Lawyer*, 29 U.S.F. L. REV. 121, 125-26 (1994).

"[e]ngage in active listening."<sup>46</sup> Some students are predisposed to be critical thinkers and can engage in this "higher order" thinking.<sup>47</sup> These critical thinkers will have a better chance at a "desirable outcome[s]."<sup>48</sup> This is because "[c]ritical thinking is purposeful, reasoned, and goal-directed. It is the kind of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions. . . . When people think critically, they evaluate the outcomes of their thought processes – how good a decision is or how well a problem is solved."<sup>49</sup>

The good news is that, even if not all students are predisposed to critical thinking, researchers agree that education can develop critical thinking as a learned skill.<sup>50</sup> "Instructors who teach critical thinking provide students with the opportunity to understand and take charge of their learning."<sup>51</sup> Thus, "[t]he goal of instruction designed to help students become better thinkers is transferability to real-world, out-of-the-classroom situations."<sup>52</sup> In conclusion, critical

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<sup>46</sup> Linda M. Murawski, *Critical Thinking in the Classroom . . . And Beyond*, 10 J. OF LEARNING IN HIGHER EDUC. 25, 26 (2014); Diane F. Halpern, *Teaching Critical Thinking for Transfer Across Domains: Dispositions, Skills, Structure Training, and Metacognitive Monitoring*, 53 AM. PSYCH. 449, 452 (1998) ("A critical thinker exhibits the following dispositions or attitudes: (a) willingness to engage in and persist at a complex task, (b) habitual use of plans and the suppression of impulsive activity, (c) flexibility or open-mindedness, (d) willingness to abandon nonproductive strategies in an attempt to self-correct, and (e) an awareness of the social realities that need to be overcome (such as the need to seek consensus or compromise) so that thoughts can become actions.").

<sup>47</sup> Halpern, *supra* note 46, at 450-51.

<sup>48</sup> *Id.* at 450. See generally Susan Stuart & Ruth Vance, *Bringing a Knife to the Gunfight: The Academically Underprepared Law Student & Legal Education Reform*, 48 VAL. U. L. REV. 41, 47 (2013) ("[T]hinking like a lawyer is more than the retrieval of knowledge. Instead, lawyers must develop higher-order thinking skills for a particular professional subset of analysis.").

<sup>49</sup> Halpern, *supra* note 46, at 450-51.

<sup>50</sup> Kalinowski, *supra* note 42, at 111; Halpern, *supra* note 46, at 451.

<sup>51</sup> Murawski, *supra* note 46, at 27.

<sup>52</sup> Halpern, *supra* note 46, at 451.

thinking is the desired outcome in a classroom. Students should be able to think critically about course content above and beyond reading the materials.

#### D. THE RELATIONSHIP ACROSS READING COMPREHENSION, CRITICAL READING, AND CRITICAL THINKING

A close connection exists across reading comprehension, critical reading, and critical thinking. As a result, students with weak reading comprehension abilities are less likely to perform critical reading and thinking tasks well. Many contexts document the connection between these abilities.

In 1956, a treatise about educational objectives and pedagogy, *Taxonomy of Educational Objectives*,<sup>53</sup> discussed curriculum development and related educational objectives to “a psychology of learning,” or a hierarchy of learning.<sup>54</sup> The treatise explained that “the most common educational objective . . . is the acquisition of knowledge or information.”<sup>55</sup> However, curricular objectives need to be more than merely acquiring knowledge, according to Bloom’s Taxonomy. The treatise recognized that “the largest general class of intellectual abilities and skills emphasized in schools and colleges are those which involve comprehension.”<sup>56</sup> Comprehension goes beyond only reading comprehension and includes other kinds of comprehension as well, including the following:

- (1) “[T]ranslation” – “an individual can put a communication into other language,

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<sup>53</sup> TAXONOMY OF EDUCATIONAL OBJECTIVES: THE CLASSIFICATION OF EDUCATIONAL GOALS, HANDBOOK I: COGNITIVE DOMAIN (1956) [hereinafter “BLOOM’S TAXONOMY”] (Benjamin S. Bloom ed.) (1956).

<sup>54</sup> *Id.* at 27.

<sup>55</sup> *Id.* at 28.

<sup>56</sup> *Id.* at 89 (explaining that “when students are confronted with a communication, they are expected to know what is being communicated and to be able to make some use of the material or ideas contained in it”).

into other terms, or into another form of communication."<sup>57</sup>

(2) "[I]nterpretation" – "dealing with a communication as a configuration of ideas whose comprehension may require a reordering of the ideas into a new configuration in the mind of the individual."<sup>58</sup>

(3) "[E]xtrapolation" – "the making of estimates or predictions . . . or the making of inferences."<sup>59</sup>

Next in the hierarchy beyond comprehension is "application" because "to apply something requires '[c]omprehension'" and, "[i]f a student really comprehends something, then he can apply it."<sup>60</sup> Moving to more advanced skills in the hierarchy of learning is "analysis."<sup>61</sup> Bloom's Taxonomy explains that analysis is more complex in the hierarchy because "[i]n comprehension the emphasis is on the grasp of the meaning and intent of the material. In application it is on remembering and bringing to bear upon given material the appropriate generalizations or principles."<sup>62</sup> Even further, "[a]nalysis emphasizes the breakdown of the material into its constituent parts and detection of the relationships of the parts and of the way they are organized."<sup>63</sup> Finally, even more advanced than analysis is "synthesis," which is "the putting together of elements and parts so as to form a whole. . . . This is the category in the cognitive domain which most clearly provides for creative behavior on the part of the learner."<sup>64</sup> More recently, Bloom's Taxonomy was revised.<sup>65</sup> The revised Bloom's Taxonomy modified the stages of learning to

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<sup>57</sup> *Id.*

<sup>58</sup> *Id.* at 90.

<sup>59</sup> *Id.*

<sup>60</sup> *Id.* at 120.

<sup>61</sup> *Id.* at 144.

<sup>62</sup> *Id.* (emphasis removed).

<sup>63</sup> *Id.* (emphasis removed).

<sup>64</sup> *Id.* at 162.

<sup>65</sup> David R. Krathwohl, *A Revision of Bloom's Taxonomy: An Overview*, 41 THEORY & PRAC. 212 (2002).

remember, understand, apply, analyze, evaluate, and create.<sup>66</sup> The revised categories rename or re-order a few of the original categories. Nevertheless, in both the original and revised versions, stages of learning exist, and more complex thinking occurs only after comprehension.

Similarly, recent general studies connect reading comprehension to critical reading and thinking. In a study published in 2020,<sup>67</sup> researchers concluded that “reading comprehension is closely related to critical thinking skills and critical reading skills.”<sup>68</sup> Because reading comprehension requires readers to “process text, understand its meaning, and to integrate with what the reader already knows,” then the process necessarily involves analysis and evaluation.<sup>69</sup> In a 2022 study about education strategies in the post-pandemic era, researchers found that, “to determine the credibility of certain information in various texts, it is necessary to employ critical thinking throughout the reading process to make a profound analysis of the former viewpoints of the presenter.”<sup>70</sup> The study also explained that, “to engage in effective critical reading, readers must fully express their subjectivity, creativity, and imagination, read extensively from multiple perspectives using various methods, . . . and then form an understanding of the information contained in the text in light of their own thinking and judgment.”<sup>71</sup> Again, reading comprehension serves as a foundation for building critical reading and thinking.

In legal education, scholars also found a clear connection between reading comprehension, critical reading, and critical thinking. “[R]ecognizing what the text *says* is reading comprehension, which is necessary for, but not the end of, critical reading.”<sup>72</sup> Going beyond critical reading, “[c]ritical reading, critical thinking, and writing are related, but separate, concepts. . . . [C]ritical thinking often includes comparing the thinker’s own values, morals, and agenda with someone else’s

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<sup>66</sup> *Id.* at 214.

<sup>67</sup> Hidayati et al., *supra* note 6, at 69.

<sup>68</sup> *Id.* at 70.

<sup>69</sup> *Id.*

<sup>70</sup> Liao & Tian, *supra* note 27, at 109.

<sup>71</sup> *Id.*

<sup>72</sup> Williams, *supra* note 25, at 184.

idea, whereas critical reading includes evaluating a piece of writing on its own merit without allowing one's personal viewpoint to take over."<sup>73</sup> Only after students "fully understand a text through critical reading" can they "evaluate its assertions through critical thinking."<sup>74</sup> Another scholar similarly found that "the concept of teaching critical reading is central to the concept of teaching thinking skills. . . . Critical reading absolutely encompasses the concept of 'critical thinking.'"<sup>75</sup> Critical reading and thinking "marry the finding of meaning with the evaluating of meaning, and indivisibly work together."<sup>76</sup>

At all stages of the learning hierarchy, relationships exist between the categories. The hierarchy and its relationships should help teachers develop effective pedagogy. Teachers must recognize this hierarchy and develop materials to help students progress beyond comprehension, especially as students proceed through the educational system. If not, students with weak comprehension skills are unlikely to further their learning by using effective critical reading and thinking skills.

## II. CURRENT NATIONAL TEST SCORES

The 2023 national test scores for elementary, middle, and high school levels were released during the 2022-23 school year. These test results are the first to occur after the COVID-19 pandemic. Indeed, the pandemic significantly disrupted education at all levels. Schools nationwide responded differently at the elementary, middle, and high school levels. Some schools continued to operate in person. Nevertheless, most schools changed their in-person teaching in some way.<sup>77</sup>

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<sup>73</sup> *Id.* at 185.

<sup>74</sup> *Id.*

<sup>75</sup> Curtis & Karp, *In a Case, In a Book*, *supra* note 30, at 295.

<sup>76</sup> *Id.*

<sup>77</sup> GAO REPORT TO CONGRESSIONAL COMMITTEES, LESS ACADEMIC PROGRESS OVERALL, STUDENT AND TEACHER STRAIN, AND IMPLICATIONS FOR THE FUTURE, GAO-22-105816, at vi (June 2022). The GAO described four instructional models used by schools during the pandemic in academic year 2020-21 based on a national survey. "In-

The instructional models ranged from in-person to completely remote teaching.<sup>78</sup> Following this time, when many schools used remote or hybrid instructional models during the pandemic, national test scores dropped.

Several kinds of testing exist to gauge school-age students' progress in both reading and math. The one that is probably the most widely known is the NAEP assessment, also known as "The Nation's Report Card."<sup>79</sup> These test scores are evaluated and studied to monitor students' learning progress. For example, a member of the Northwest Evaluation Association ("NWEA") and professors at Harvard University, Stanford University, Dartmouth College, and Johns Hopkins University conducted a study called the "Education Recovery Scorecard," which focused on NAEP scores during the pandemic.<sup>80</sup> The NWEA<sup>81</sup> and the Government Accountability Office (GAO)<sup>82</sup> have also conducted studies. This section will summarize these tests and studies in turn.

#### A. THE NATION'S REPORT CARD AND THE EDUCATION RECOVERY SCORECARD

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person" teaching was "teaching and learning [that] occur[ed] in the same classroom." *Id.* "Virtual" teaching was "teaching and learning [that] occur[ed] via information technology (hardware and software), including video or audio conferencing and document sharing." *Id.* Virtual learning "could be supplemented with printed assignments and could be synchronous (real time) or asynchronous (accessed at any time)." *Id.* "Hybrid" teaching was "teaching and learning [that] occur[ed] in person on certain days of the week and virtually on other days." *Id.* And finally, "[m]ixed" teaching occurred when "teachers present[ed] lessons simultaneously to students learning in person and to those learning virtually." *Id.*<sup>78</sup> *Id.*

<sup>79</sup> 2022–2023 Long-Term Trend (LTT) Mathematics and Reading Assessments at Ages 9 and 13, *supra* note 3.

<sup>80</sup> ERIN M. FAHLE ET AL., SCHOOL DISTRICT AND COMMUNITY FACTORS ASSOCIATED WITH LEARNING LOSS DURING THE COVID-19 PANDEMIC (May 2023),

[https://cepr.harvard.edu/sites/hwpi.harvard.edu/files/cepr/files/explaining\\_covid\\_losses\\_5.23.pdf](https://cepr.harvard.edu/sites/hwpi.harvard.edu/files/cepr/files/explaining_covid_losses_5.23.pdf).

<sup>81</sup> NWEA, <https://www.nwea.org/> (last visited Dec. 4, 2023).

<sup>82</sup> GAO, <https://www.gao.gov/> (last visited Dec. 4, 2023).



The NAEP, first administered in 1969, “is the largest continuing and nationally representative assessment of what our nation’s students know and can do in subjects such as mathematics, reading, science, and writing.”<sup>83</sup> The NAEP “is a congressionally mandated project that is overseen and administered by the National Center for Education Statistics (“NCES”), within the U.S. Department of Education’s Institute of Education Sciences.”<sup>84</sup> While states have their unique standardized tests, the NAEP administers the same test in every state, which “provid[es] educators, policymakers, and parents with a common measure of student achievement that allows for direct comparisons among states and participating urban districts.”<sup>85</sup> Specifically, the NAEP tests a variety of subjects, including reading, at the fourth, eighth, and twelfth-grade levels.<sup>86</sup> The NAEP conducts “main” testing every two years and “long-term trend” testing every four years.<sup>87</sup>

## 1. DESCRIPTION OF THE MAIN AND LONG-TERM TREND TESTING

Regarding the main NAEP reading testing, the test “features fiction, literary nonfiction, poetry, exposition, document, and procedural texts or pairs of texts, and focuses on identifying explicitly stated information, making complex inferences about themes, and comparing multiple texts on a variety of dimensions.”<sup>88</sup> The reading assessment “uses literary

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<sup>83</sup> *About the Nation’s Report Card*, THE NATION’S REP. CARD, <https://www.nationsreportcard.gov/about.aspx> (last visited Dec. 4, 2023).

<sup>84</sup> *An Overview of NAEP*, NAT’L CTR. FOR EDUC. STAT., [https://nces.ed.gov/nationsreportcard/subject/about/pdf/naep\\_overview\\_brochure\\_2021.pdf](https://nces.ed.gov/nationsreportcard/subject/about/pdf/naep_overview_brochure_2021.pdf) (last visited Dec. 4, 2023).

<sup>85</sup> *Id.*

<sup>86</sup> *Id.*

<sup>87</sup> *What are the Differences Between Long-Term Trend NAEP and Main NAEP?*, NAT’L CTR. FOR EDUC. STAT., [https://nces.ed.gov/nationsreportcard/about/ltt\\_main\\_diff.aspx](https://nces.ed.gov/nationsreportcard/about/ltt_main_diff.aspx) (Feb. 1, 2024).

<sup>88</sup> *Id.*

and informational texts to measure students' reading comprehension skills. Students read grade-appropriate passages and answer questions based on what they have read."<sup>89</sup> Questions include multiple choice, short answer, and extended answer kinds of questions.<sup>90</sup> Literary texts include "fiction, literary nonfiction, and poetry," while informational texts include "exposition, argumentation and persuasive texts, and procedural texts and documents."<sup>91</sup> The reading assessments have three "cognitive targets," which "refer[] to the mental processes or kinds of thinking that underlie reading comprehension."<sup>92</sup> Specifically, the three cognitive targets are:

**Locate and Recall.** When locating or recalling information from what they have read, students may identify explicitly stated information or may focus on specific elements of a story.

**Integrate and Interpret.** When integrating and interpreting what they have read, students make complex inferences within and across texts; they may explain character motivation, infer the main idea of an article, or infer and explain the theme of a story.

**Critique and Evaluate.** When critiquing or evaluating what they have read, students consider the text critically by viewing it from numerous perspectives; they may evaluate overall text quality or the effectiveness of particular aspects of the text.<sup>93</sup>

For the main reading assessment for fourth and eighth graders, the NAEP strives to select students to be "representative of all schools and of public schools at the state/jurisdiction and Trial Urban District Assessment ("TUDA") district levels."<sup>94</sup> Specifically, in 2022, when the NAEP reading assessment was most recently given to fourth

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<sup>89</sup> *About the NAEP Reading Assessment*, THE NATION'S REP. CARD, <https://www.nationsreportcard.gov/reading/about/framework/?grade=4> (last visited Dec. 4, 2023).

<sup>90</sup> *What are the Differences Between Long-Term Trend NAEP and Main NAEP?*, *supra* note 87.

<sup>91</sup> *About the NAEP Reading Assessment*, *supra* note 89.

<sup>92</sup> *Id.*

<sup>93</sup> *Id.*

<sup>94</sup> *Id.*

and eighth graders, “[t]he results . . . [we]re based on the representative samples of 108,200 fourth-graders from 5,780 schools and 111,300 eighth-graders from 5,190 schools.”<sup>95</sup> For twelfth-grade students, the most recent NAEP testing was conducted in 2019, and the results “[we]re based on a national sample of approximately 26,700 twelfth-graders from 1,780.”<sup>96</sup> In both, the NAEP collects testing results from various demographics, including students with disabilities and English-as-a-second-language learners.<sup>97</sup>

With the long-term trend testing, the test “features short narrative, expository, or document passages, and focuses on locating specific information, making inferences, and identifying the main idea of a passage,” although passages are often shorter than those used in the main testing.<sup>98</sup> Instead of being administered to students by grade, the long-term trend testing is administered by age, specifically ages nine, thirteen, and seventeen.<sup>99</sup> The most recent long-term trend testing for students ages nine and thirteen was conducted in 2022.<sup>100</sup>

## 2. NAEP TESTING RESULTS’ RECENT DECLINE

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<sup>95</sup>*Id.* Specifically, “[s]amples of schools and students are drawn from each state and from the District of Columbia and Department of Defense schools. The sample of students participating in the TUDA school districts is an extension of the sample of students who would usually be selected by NCES as part of national and state samples for the NAEP assessment. Representative samples of 24,100 fourth-grade and 24,900 eighth-grade public school students from 26 urban districts participated in the 2022 reading assessment.” *Id.*

<sup>96</sup> *Id.* (“Results are reported for the nation only and reflect the performance of students attending public schools, private schools, Bureau of Indian Education schools, and Department of Defense schools.”).

<sup>97</sup> *Id.*

<sup>98</sup> *What are the Differences Between Long-Term Trend NAEP and Main NAEP?*, *supra* note 87.

<sup>99</sup> *Explore NAEP Long-Term Trends in Reading and Mathematics*, THE NATION’S REP. CARD,

<https://www.nationsreportcard.gov/ltr/?age=9> (last visited Dec. 4, 2023).

<sup>100</sup> No recent reports were found for the age 17 students. *See id.*

The NAEP main testing and the long-term trend testing showed a decline in students' performance since before the pandemic. The following will discuss the decline at the fourth and eighth-grade levels for the main testing because the test was administered to these students in 2022; however, twelfth-grade students have not been tested since 2019, which was before the pandemic. Similarly, the following will discuss the long-term trend assessment results for students aged nine and thirteen because the assessments were administered in 2022, after the pandemic.

First, to summarize the 2022 results for the main testing, the average reading scores decreased compared to 2019.<sup>101</sup> In fact, in some instances, the scores were as low as those in the 1992 testing.<sup>102</sup> Of concern is that larger declines in scores occurred for "lower-performing students" and score declines occurred for most demographics.<sup>103</sup>

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<sup>101</sup> *Scores Decline in NAEP Reading at Grades 4 and 8 Compared to 2019*, THE NATION'S REP. CARD, <https://www.nationsreportcard.gov/highlights/reading/2022/> (last visited Dec. 4, 2023). This page explains that "the average reading score at both fourth and eighth grade decreased by 3 points compared to 2019. At fourth grade, the average reading score was lower than all previous assessment years going back to 2005 and was not significantly different in comparison to 1992. At eighth grade, the average reading score was lower compared to all previous assessment years going back to 1998 and was not significantly different compared to 1992. In 2022, fourth- and eighth-grade reading scores declined for most states/jurisdictions compared to 2019." *Id.*

<sup>102</sup> *Id.*

<sup>103</sup> *Key Findings for Grade 4*, THE NATION'S REP. CARD, [https://www.nationsreportcard.gov/mathematics/supportive\\_files/2022\\_rm\\_infographic.pdf](https://www.nationsreportcard.gov/mathematics/supportive_files/2022_rm_infographic.pdf) (last visited Dec. 4, 2023). For fourth-grade students, the data showed "[l]arger score declines for lower-performing students than higher performers[;] . . . [s]core declines for American Indian/Alaska native, Black, Hispanic, and White students;" and "[s]core declines for most states/jurisdictions," although there were no score changes for Catholic school students or students with disabilities. *Id.* For eighth grade students, the data exhibited "[c]onsistent score declines across percentiles[;] [s]core decline for White students; no score changes for other racial/ethnic groups; [n]o score change for students with disabilities; . . . [n]o score

Second, the 2022 long-term trend results were similarly low compared to prior years. The scores for students in the age nine group dropped so many points that it “is the largest average score decline in reading since 1990.”<sup>104</sup> For both the age nine and age thirteen groups, reading comprehension scores dropped, and not insignificantly.<sup>105</sup>

As can be seen using the data from both the NAEP main testing and the long-term trend testing, educational declines during the pandemic are significant. Any decline would be worrisome, but the decrease averages three to seven points. Putting this in perspective, the test scores are more indicative of testing done in the early 1990s, roughly a thirty-year backslide in scores. Of further concern, scores declined in almost all jurisdictions, and scores declined for most demographic groups – American Indian/ Alaska Native, Black, Hispanic, and White students. Moreover, poor performers had more significant declines than stronger performers, which could cause those students to fall even further behind. These declines

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change for Catholic school students; [and] [s]core declines for most states/jurisdictions.” *Id.*

<sup>104</sup> *Reading and Mathematics Scores Decline During COVID-19 Pandemic*, THE NATION’S REP. CARD,

<https://www.nationsreportcard.gov/highlights/ltt/2022/> (last visited Dec. 4, 2023).

<sup>105</sup> *Id.* This page states that, “[i]n 2022, . . . a special administration of the NAEP long-term trend (LTT) [was given for] reading and mathematics assessments for age 9 students to examine student achievement during the COVID-19 pandemic.” *Id.* To summarize these results for nine-year-old students, “[a]verage scores for age 9 students in 2022 declined 5 points in reading . . . compared to 2020. This is the largest average score decline in reading since 1990 . . . .” *Id.* Similarly, the reading assessment was given “to 13-year-old students from October to December of the 2022–23 school year.” *Scores Decline Again for 13-Year-Old Students in Reading and Mathematics*, THE NATION’S REP. CARD,

<https://www.nationsreportcard.gov/highlights/ltt/2023/> (last visited Dec. 4, 2023). Similar to the nine-year-old students, “[t]he average scores for 13-year-olds declined 4 points . . . compared to the previous assessment administered during the 2019–20 school year. Compared to a decade ago, the average scores declined 7 points in reading . . . .” *Id.*

are widespread nationwide, as evidenced by the nationwide distribution of the NAEP assessments.

### 3. THE EDUCATION RECOVERY SCORECARD<sup>106</sup>

The NAEP test results were further analyzed in the Education Recovery Scorecard. Using the NAEP data to compare test results in 2019 and 2022,<sup>107</sup> the authors of the Education Recovery Scorecard analyzed the data to look for patterns and to evaluate the data across communities.<sup>108</sup> For

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<sup>106</sup> The Education Recovery Scorecard is project undertaken by “the Center for Education Policy Research at Harvard” and “Stanford’s Educational Opportunity Project.” *About, EDUC. RECOVERY SCORECARD*, <https://educationrecoveryscorecard.org/about/> (last visited Dec. 4, 2023). The collaboration “provide[s] the first view of district-level losses between 2019 and 2022. Many states have reported results on Spring 2022 assessments, but because each state sets its own proficiency levels, it’s not possible to compare changes in proficiency rates on different states’ tests. [The project] use[d] the 2022 NAEP scores to put the state proficiency levels on the same scale, and then report comparable declines by district and subgroup across the country.” *Id.*

<sup>107</sup> FAHLE ET AL., *supra* note 80. It is important to note that the authors conducted a literature review of other reports that “documented learning losses in U.S. schools” since the beginning of the pandemic. *Id.* at 4-5. Further, in addition, the achievement data came “from a restricted-use version of Stanford Education Data Archive” (SEDA), which “provides test score estimates for schools and districts from 2009 through 2022 in math and reading language arts . . . for grades 3 to 8 for all students and for racial and economic subgroups. The test score estimates are constructed from state accountability test data and linked to the NAEP, such that they are comparable across states and time.” *Id.* at 7-8. The authors also gathered data at the county and district level from a variety of sources, including but not limited to, the Common Core of Data and the Longitudinal School Demographic Dataset. *Id.* at 10-12.

<sup>108</sup> The methodology used by the Education Recovery Scorecard states, “[a]lthough many states have released their 2022 grade 3-8 test results for each of their school districts, the proficiency score thresholds that most states release are not optimal for all purposes and are difficult to compare across states. To remedy this, we use methods developed by the Educational Opportunity Project at

instance, while the eighth-grade reading scores declined by an average of three points (“roughly one-quarter of a grade level”),<sup>109</sup> the results varied by state. In sum, the Education Recovery Scorecard’s evidence “adds to the growing number of studies documenting the learning losses resulting from the COVID-19 pandemic.”<sup>110</sup> Specifically, the study resulted in three notes relevant to this article. First, “pandemic-related learning losses are historic in magnitude and highly variable among communities.”<sup>111</sup> The learning losses in reading were “substantially larger . . . between 2019 to 2022 than between 2016 and 2019.”<sup>112</sup> Second, “scores declined more in high poverty and high minority districts; and in districts that spent more time in remote and hybrid instruction during the 2020-21 school year.”<sup>113</sup> Finally, “the associations between learning loss and district poverty, racial composition, and instructional modality were similar for different subgroups of students within districts – Black, Hispanic, White students and

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Stanford University to combine two sources of information to measure academic achievement on a common scale across school districts in different states. State assessments given to students in grades 3-8 enable us to compare achievement between districts in the same state and year; the 2019 and 2022 NAEP test results allow us to compare achievement between states and across years. By combining information on how high a districts’ average test scores are relative to those in their state in a given year (using state assessment data) and information on how high a states’ average test scores are relative to the 2019 national average (using NAEP assessment results) we can make valid comparisons between districts in different states and over the 2019-2022 period. Moreover, we use data from NAEP to calibrate differences in test scores relative to the amount a typical child’s scores during a grade; using this calibration, we can measure[] changes in test scores between 2019 and 2022 (and between different districts) in terms of grade-level equivalents, a metric accessible to broad audiences.” *About, supra* note 106.

<sup>109</sup> FAHLE ET AL., *supra* note 80, at 3.

<sup>110</sup> *Id.* at 24.

<sup>111</sup> *Id.*

<sup>112</sup> *Id.*

<sup>113</sup> *Id.*

economically disadvantaged and not disadvantaged students.”<sup>114</sup>

The analysis conducted by the Education Recovery Scorecard supports the finding that reading test scores declined significantly during the pandemic. The analysis stresses that the learning losses are historical, consistent with the data that the scores are more indicative of those from thirty years ago. The analysis also explicitly connected more significant learning losses to schools that spent more time in a remote or hybrid instructional model. The analysis also highlighted the concern of learning losses in high minority or high poverty areas. All these data points and conclusions are alarming.

## B. NWEA STUDY

Another study was conducted by the Northwest Evaluation Association (“NWEA”). The NWEA “is a research-based, not-for-profit organization that supports students and educators worldwide by creating assessment solutions that precisely measure growth and proficiency—and provide insights to help tailor instruction. . . . [It] has developed pre-K-12 assessments and professional learning offerings to help advance all students along their optimal learning paths.”<sup>115</sup> The NWEA provides MAP Growth testing, which “measur[es] achievement and growth in K-12 math, reading, language usage, and science. It provides teachers with accurate, actionable evidence to help inform instructional strategies regardless of how far students are above or below grade level.”<sup>116</sup> For the reading assessment, similar to the NAEP testing, the MAP Growth testing includes literary and informational texts while also testing vocabulary.<sup>117</sup>

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<sup>114</sup> *Id.*

<sup>115</sup> NWEA Map, MICH. DATAHUB, <https://www.midatahub.org/pub/stories/view/nwea-map> (last visited Mar. 3, 2024).

<sup>116</sup> *MAP Growth*, NWEA, <https://www.nwea.org/map-growth/> (last visited Dec. 4, 2023).

<sup>117</sup> *MAP Growth Reading*, NWEA, <https://www.nwea.org/resource-center/fact-sheet/48359/MAP-Growth-Reading-Fact-Sheet-1.pdf/> (last visited Dec. 4, 2023).



Additionally, the NWEA funds research centers, including the Center for School and Student Progress.<sup>118</sup> This Center “explores research and policy issues that are directly relevant to helping schools improve outcomes for students. It engages in collaborative research with schools[] and provides them with expert consultation and data analysis.”<sup>119</sup>

The Center for School and Student Progress conducted studies throughout the pandemic to gauge student progress, whether gains or losses. In a report dated December 2021,<sup>120</sup> the researchers noted “declines in fall 2021 achievement relative to fall 2018, ranging in magnitude from 3 to 7 percentile points in reading.”<sup>121</sup> In fact, the “declines [we]re larger than the declines observed in fall 2020 (when reading scores were approximately equivalent to a typical year . . . but are roughly consistent with those observed in spring 2021.”<sup>122</sup> Unfortunately, although more pronounced in the math scoring, “[h]istorically marginalized students and students in high-poverty schools continue to be the most impacted.”<sup>123</sup>

In a report dated July 2023 from the Center for School and Student Progress,<sup>124</sup> the testing results are similarly bleak. In this report, the researchers “examined whether US students made additional progress toward pandemic recovery during the 2022-23 school year.”<sup>125</sup> The findings showed that “achievement gains in 2022-23 lagged pre[-]pandemic trends in all but the youngest cohort of students and significant achievement gaps remain at the end of this school year.”<sup>126</sup>

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<sup>118</sup> NWEA *Research*, NWEA, <https://www.nwea.org/research/> (last visited Dec. 4, 2023).

<sup>119</sup> *Id.*

<sup>120</sup> KARYN LEWIS & MEGAN KUHFIELD, *LEARNING DURING COVID-19: AN UPDATE ON STUDENT ACHIEVEMENT AND GROWTH AT THE START OF THE 2021-22 SCHOOL YEAR* (Dec. 2021).

<sup>121</sup> *Id.* at 2.

<sup>122</sup> *Id.*

<sup>123</sup> *Id.*

<sup>124</sup> KARYN LEWIS & MEGAN KUHFIELD, *EDUCATION’S LONG COVID: 2022-23 ACHIEVEMENT DATA REVIEW STALLED PROGRESS TOWARD PANDEMIC RECOVERY* (July 2023).

<sup>125</sup> *Id.* at 8.

<sup>126</sup> *Id.*

Further, the lag in gains was true for all students, which “implies that marginalized students, who have been hardest hit by the pandemic, did not experience any additional catch-up. . . . All students face a lengthy road to recovery, and our estimates indicate that road will be longer still for historically marginalized students.”<sup>127</sup>

The NWEA’s reporting is just as disturbing as the NAEP data. In Fall 2021, the reading testing saw a reduction in points between three and seven, and no progress occurred during the 2022-23 academic year. Therefore, students have not caught up in their learning losses. The report also highlights the concern that a continuing lag in learning remediation is even more significant for historically marginalized students. Thus far, studies show a consistency in the reporting of declines as found by the Nation’s Report Card, the Education Recovery Scorecard, and NWEA’s testing and analysis.

### C. GAO STUDY

Finally, the United States Government Accountability Office (“GAO”) conducted surveys on student learning during the pandemic and provided various reports to Congressional committees.<sup>128</sup> In June 2022, the GAO submitted a report titled “Less Academic Progress Overall, Student and Teacher Strain, and Implications for the Future.”<sup>129</sup> One of the data points the GAO used was a Gallup poll sent to a “nationally representative” group of “elementary and secondary public

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<sup>127</sup> *Id.* at 9.

<sup>128</sup> See GAO REPORT TO CONGRESSIONAL COMMITTEES, PANDEMIC LEARNING: AS STUDENTS STRUGGLED TO LEARN, TEACHERS REPORTED FEW STRATEGIES AS PARTICULARLY HELPFUL TO MITIGATE LEARNING LOSS, GAO-22-104487 (May 2022); GAO REPORT TO CONGRESSIONAL COMMITTEES, PANDEMIC LEARNING: TEACHERS REPORTED MANY OBSTACLES FOR HIGH-POVERTY STUDENTS AND ENGLISH LEARNERS AS WELL AS SOME MITIGATING STRATEGIES, GAO-22-105815 (May 2022); GAO REPORT TO CONGRESSIONAL COMMITTEES, LESS ACADEMIC PROGRESS OVERALL, STUDENT AND TEACHER STRAIN, AND IMPLICATIONS FOR THE FUTURE, GAO-22-105816 (June 2022).

<sup>129</sup> GAO REPORT TO CONGRESSIONAL COMMITTEES, LESS ACADEMIC PROGRESS OVERALL, STUDENT AND TEACHER STRAIN, AND IMPLICATIONS FOR THE FUTURE, *supra* note 128.

school teachers”<sup>130</sup> to “ask[] teachers about their instructional models, adult support provided to their students, difficulties their students faced, their students’ academic progress, strategies they used to mitigate learning loss, and the extent to which their students were engaged in learning, among other topics.”<sup>131</sup> Regarding learning loss, the GAO “estimate[s] that, compared to a typical year, teachers had more students start the 2020-21 school year behind and make less academic progress. Further, almost all teachers had students who ended the year behind.”<sup>132</sup> In fact, the GAO “estimate[s] that about half of the teachers . . . had more students who were behind at the beginning of the 2020-21 school year compared to a typical year.”<sup>133</sup> And “[t]he majority of teachers (an estimated 64 percent) had more students who made less academic progress across all grade levels and instructional models compared to a typical school year.”<sup>134</sup>

Although the GAO study did not base its findings on objective test scores or a particular subject, such as reading, the survey results provide instruction. At least anecdotally, in response to survey questions, most teachers reported fewer academic gains than in pre-pandemic years. The objective testing of the NAEP and NWEA testing supports this anecdotal evidence. Therefore, teachers are seeing performance declines in their students that mirror the decrease in test scores. The concerning test scores, therefore, are carried over into a decreased ability of students to perform in schools on a day-to-day basis.

### III. RAMIFICATIONS OF DECREASED READING COMPREHENSION SCORES ON FUTURE LAW STUDENTS

With the close link between reading comprehension, critical reading, and critical thinking, how will the current decline in national reading comprehension test scores correlate with the performance of future law students? As explained in

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<sup>130</sup> *Id.* at iv.

<sup>131</sup> *Id.* at v.

<sup>132</sup> *Id.* at 1.

<sup>133</sup> *Id.*

<sup>134</sup> *Id.* at 3.

the first section, reading comprehension is a precursor to critical reading and writing. Further, the NAEP definition of reading acknowledges a direct correlation between comprehension, critical reading, and thinking in that reading is more than a passive activity. The NAEP targets integrating/interpreting and critiquing/evaluating text as part of its reading assessment. Thus, the NAEP test results provide some objective evidence that, with the trend in lower scores in reading comprehension, future law students who are currently in elementary, middle, and high schools also will have a decline in critical reading and thinking abilities as they begin law school later in their educational careers. The students who were in elementary, middle, or high school during the pandemic and who have demonstrated a significant drop in reading comprehension ability could be entering law school as early as 2027 (if they were high school students) or as late as 2037 (if they were kindergarten students). Thus, a logical conclusion is that these students will not have the critical reading and critical thinking skills needed to succeed in law school.<sup>135</sup> This problem is concerning, mainly because teachers have complained about students' lack of critical thinking skills for years, even before the decline in testing scores during the pandemic.

In general, critics have highlighted shortcomings in schools' teaching of critical thinking skills for many years. For instance, in *A Nation at Risk*, a 1983 report by the National Commission on Excellence in Education,<sup>136</sup> the authors stated the following:

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<sup>135</sup> A caveat here is that it is certainly possible that schools will remedy the deficiencies in students' test performances in the upcoming years so that students will be prepared for law school in 2027 and beyond. Nevertheless, as explained in the following paragraphs, education has been criticized even before the significant decline in test scores during the pandemic, so it seems unlikely that the education system will react quickly enough to remedy the decline for all students who were in elementary, middle, or high school during the pandemic in time for their entry into law schools.

<sup>136</sup> DAVID P. GARDNER ET AL., UNITED STATES NATIONAL COMMISSION ON EXCELLENCE IN EDUCATION, *A NATION AT RISK: THE IMPERATIVE FOR EDUCATIONAL REFORM. AN OPEN LETTER TO THE AMERICAN PEOPLE. A REPORT TO THE NATION AND THE SECRETARY OF EDUCATION* (1983) [hereinafter *A NATION AT RISK*].

Our society and its educational institutions seem to have lost sight of the basic purposes of schooling, and of the high expectations and disciplined effort needed to attain them. This report, the result of 18 months of study, seeks to generate reform of our educational system in fundamental ways and to renew the Nation's commitment to schools and colleges of high quality throughout the length and breadth of our land.<sup>137</sup>

Specifically regarding critical thinking, the report found that "[m]any 17-year-olds do not possess 'higher order' intellectual skills we should expect of them."<sup>138</sup> Similarly, a 2008 report entitled *A Nation Accountable*<sup>139</sup> was published after the enactment of the No Child Left Behind Act of 2001,<sup>140</sup> so all states had both reading and math standards and tests, the results of which were publicly available.<sup>141</sup> The report concluded that, with the No Child Left Behind Act, "[w]e have transformed ourselves from a nation at risk of complacency to a nation that is accountable and at work on its education weaknesses."<sup>142</sup> Nevertheless, testing showed that "two-thirds of our fourth-graders are still not proficient readers."<sup>143</sup> The report explained the remaining challenges, stating, "[o]n a strictly domestic level, our performance at the high school level

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<sup>137</sup> *Id.* at 5-6.

<sup>138</sup> *Id.* at 9. The report further stated that basic reading was taught at the expense of other essential skills "such as comprehension, analysis, solving problems, and drawing conclusions." *Id.* at 10. Therefore, the report urged more rigor in schools' curricula. *See id.* at 24. In particular, for the teaching of high school English, the report stated that students should be able to "(a) comprehend, interpret, evaluate, and use what they read; (b) write well-organized, effective papers; [and] (c) listen effectively and discuss ideas intelligently." *Id.* at 25.

<sup>139</sup> U.S. DEPARTMENT OF EDUCATION, *A NATION ACCOUNTABLE: TWENTY-FIVE YEARS AFTER A NATION AT RISK* (2008) [hereinafter *A NATION ACCOUNTABLE*].

<sup>140</sup> No Child Left Behind Act of 2001, 20 U.S.C. § 6319. This Act has been replaced by the Every Student Succeeds Act of 2015, 20 U.S.C. § 6301.

<sup>141</sup> *A NATION ACCOUNTABLE*, *supra* note 139, at 5, 8.

<sup>142</sup> *Id.* at 8.

<sup>143</sup> *Id.* at 9.

is as alarming as it was at the time of *A Nation at Risk*, if not worse.”<sup>144</sup>

More recently, for elementary through high school education, an organization called The Reboot Foundation<sup>145</sup> “examined survey questions from the 2019 NAEP background questionnaire, the most recent available. Specifically, Reboot looked at teachers’ self-reported efforts around teaching and instilling critical thinking skills in their students.”<sup>146</sup> Reboot reported a “measurable trend” in the NAEP data that “in most states there is a desire by teachers to incorporate critical thinking skills into the classroom.”<sup>147</sup> The Reboot information provides that “[i]t is extremely positive that a large swath of the population values critical thinking and agrees that it should be taught throughout K-12, and that it is a critical life skill.”<sup>148</sup> Unfortunately, the report found that states do not have the same or even clear strategies for including critical thinking in curriculums. Thus, although critical thinking is encouraged in the classroom, “[t]here remains a lack of proven resources for them to rely on, a lack of administrative support—and sometimes even a lack of a clear sense of what exactly critical thinking is. Perhaps most importantly, teachers lack the time

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<sup>144</sup> *Id.* at 10 (noting that a major contributory factor is the high school drop-out rate).

<sup>145</sup> The Reboot Foundation “is devoted to elevating critical thinking. In a time of vast technological change, the foundation aims to promote richer, more reflective forms of thought in schools, homes, and businesses. The foundation funds efforts to better integrate critical thinking in the daily lives of people around the world. It conducts surveys and opinion polls, leads its own research, and supports the work of independent scholars. The Reboot Foundation also develops practical tools for parents, teachers, employers, and others interested in cultivating a capacity for critical thinking.”

About the Reboot Foundation, REBOOT, <https://reboot-foundation.org/about/> (last visited Dec. 4, 2023).

<sup>146</sup> Helen Lee Bouygues, *Teaching Critical Thinking in K-12: When There’s a Will but Not Always a Way*, REBOOT 4 (June 2022), [https://reboot-foundation.org/wp-content/uploads/2022/07/Reboot-White-Paper\\_NAEP-5.pdf](https://reboot-foundation.org/wp-content/uploads/2022/07/Reboot-White-Paper_NAEP-5.pdf).

<sup>147</sup> *Id.* at 7.

<sup>148</sup> *Id.* at 9.

and freedom within the curriculum to teach these skills.”<sup>149</sup> While schools might not effectively teach critical thinking before higher education, it is evident that society values critical thinking, which is a teachable skill. The key for elementary through high schools is to teach critical thinking more effectively.

Higher education values critical thinking, but curriculums at this level, similar to the findings at the pre-college levels, widely lack in its instruction. In *Academically Adrift*,<sup>150</sup> researchers developed a “state-of-the-art assessment instrument to measure undergraduate learning” called the “Collegiate Learning Assessment (CLA).” They administered the CLA to students at twenty-four four-year colleges and universities in their first semester and then again at the end of their sophomore year.<sup>151</sup> The report first acknowledged that “[t]eaching students to think critically and communicate effectively are espoused as the principal goals of higher education.”<sup>152</sup> However, they found that the “commitment to these skills appears more a matter of principle than practice.”<sup>153</sup> After conducting the CLA study, the researchers concluded that “[t]hree semesters of college education . . . ha[d] a barely noticeable impact on students’ skills in critical thinking, complex reasoning, and writing.”<sup>154</sup>

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<sup>149</sup> *Id.*

<sup>150</sup> RICHARD ARUM & JOSIPA ROKSA, *ACADEMICALLY ADRIFT: LIMITED LEARNING ON COLLEGE CAMPUSES* (2011) [hereinafter *ACADEMICALLY ADRIFT*].

<sup>151</sup> *Id.* at 20 (explaining that over 2,000 students participated). The CLA consisted of open-ended questions, a performance task, and analytical writing assignments designed to test “core outcomes espoused by all of higher education – critical thinking, analytical reasoning, problem solving and writing.” *Id.* at 21. In other words, the CLA was not testing for just “specific content knowledge.” *Id.* (emphasis removed).

<sup>152</sup> *Id.* at 35.

<sup>153</sup> *Id.*

<sup>154</sup> *Id.* It was stated that “[t]he end result is that many students are only minimally improving their skills in critical thinking, complex reasoning, and writing during their journeys through higher education.” *Id.*

Finally, moving beyond college and into law school research and findings, critical thinking is a valued skill. For example, ABA Standard 302(b) lists as a learning outcome “[l]egal analysis and reasoning, legal research, problem-solving, and written and oral communication in the legal context.”<sup>155</sup> Further, in terms of the value of critical thinking in law schools, the *MacCrate Report* in 1992<sup>156</sup> listed “[p]roblem solving” and “[l]egal analysis and reasoning” as “fundamental lawyering skills.”<sup>157</sup> Problem solving was described as “1.1 Identifying and diagnosing the Problem; 1.2 Generating Alternative Solutions and Strategies; 1.3 Developing a plan of action; 1.4 Implementing the plan; 1.5 Keeping the planning process open to new information and new ideas.”<sup>158</sup> Legal analysis and reasoning were defined as “2.1 Identifying and formulating legal issues; 2.2 Formulating relevant legal theories; 2.3 Elaborating legal theory; 2.4 Evaluating legal theory; 2.5 Criticizing and synthesizing legal argumentation.”<sup>159</sup> These categories go beyond mere knowledge acquisition and reading comprehension; they incorporate skills that fit into critical reading and critical thinking categories.

Next, several other reports discuss the importance of critical thinking in law schools. The *Carnegie Report*<sup>160</sup> recognized that law schools must prioritize “analytical thinking.”<sup>161</sup> The *Carnegie Report* defined legal analysis as a “prior condition for practice because it supplies the essential

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<sup>155</sup> AM. BAR ASS’N, ABA STANDARDS AND RULES OF PROCEDURE FOR APPROVAL OF LAW SCHOOLS 17 (2023) (Standard 302(b) Learning Outcomes).

<sup>156</sup> ABA SECTION OF LEGAL EDUCATION & ADMISSIONS TO THE BAR, LEGAL EDUCATION AND PROFESSIONAL DEVELOPMENT – AN EDUCATIONAL CONTINUUM: REPORT OF THE TASK FORCE ON LAW SCHOOLS AND THE PROFESSION: NARROWING THE GAP (1992) [known as the MACCRATE REPORT].

<sup>157</sup> *Id.* at 7.

<sup>158</sup> *Id.*

<sup>159</sup> *Id.*

<sup>160</sup> WILLIAM M. SULLIVAN ET AL., EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW (2007) (by the Carnegie Foundation for the Advancement of Teaching) [known as the CARNEGIE REPORT].

<sup>161</sup> *Id.* at 13.



background assumptions and rules for engaging with the work through the medium of the law.”<sup>162</sup> The Report further states, “[t]he ability to think like a lawyer emerges as the ability to translate messy situations into the clarity and precision of legal procedure and doctrine and then to take strategic action through legal argument in order to advance a client’s cause before a court or in negotiation.”<sup>163</sup>

In the *Best Practices for Legal Education*,<sup>164</sup> the authors include characteristics of effective lawyers, such as “self-reflection and lifelong learning skills” and “intellectual and analytical skills.”<sup>165</sup> In discussing reflection, the authors stated that “the ability to think strategically about your own learning path . . . requires the self-awareness to know one’s own goals, the resources that are needed to pursue them, and [one’s] current strengths and weaknesses.”<sup>166</sup> Moreover, in discussing intellectual skills, the authors explained that lawyers must “apply methods and techniques to review, consolidate, extend, and apply knowledge and understanding and to initiate and carry out projects” and “critically evaluate arguments, assumptions, abstract concepts and data to make judgments and to frame appropriate questions to achieve a solution, or identify a range of solutions to a problem.”<sup>167</sup> Lawyers also need “[p]ractical judgment,” which is “the key faculty needed when lawyers seek to identify, assess, and propose concrete solutions in particular and often complex social circumstances.”<sup>168</sup>

A couple of other sources are also instructive. The *Legal Writing Sourcebook* recognized that all legal research and writing programs “fundamentally endeavor to teach students to think and communicate like lawyers,” including teaching students to “analyze facts, legal issues, and relevant legal authorities” and to “apply legal knowledge and skills to solve novel legal

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<sup>162</sup> *Id.*

<sup>163</sup> *Id.* at 54.

<sup>164</sup> ROY STUCKEY ET AL., *BEST PRACTICES FOR LEGAL EDUCATION: A VISION AND A ROAD MAP* (2007) [hereinafter *BEST PRACTICES*].

<sup>165</sup> *Id.* at 65.

<sup>166</sup> *Id.* at 66.

<sup>167</sup> *Id.* at 67.

<sup>168</sup> *Id.* at 68.

problems.”<sup>169</sup> Finally, in a study by the Institute for the Advancement of the American Legal System (“IAALS”), minimal competencies include more than mere memorization and comprehension, including such things as “interpret[ing] legal materials,”<sup>170</sup> “identify[ing] legal issues,”<sup>171</sup> having the “ability to understand the ‘big picture’ of client matters,”<sup>172</sup> and “pursuing self-directed learning.”<sup>173</sup>

In these various reports, lawyers’ required skills are more than mere knowledge and comprehension. All the definitions above relate directly to critical reading and critical thinking. However, like with other educational experiences, law students often lack critical thinking abilities.<sup>174</sup> The

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<sup>169</sup> AM. BAR ASS’N, LEGAL EDUCATION AND ADMISSIONS TO THE BAR, LEGAL WRITING SOURCEBOOK 63 (3d ed. 2020).

<sup>170</sup> Deborah Jones Merritt & Logan Cornett, *Building a Better Bar: The Twelve Building Blocks of Minimum Competence*, INST. FOR THE ADVANCEMENT OF THE AM. LEGAL SYS. 3, 39 (2020), [https://iaals.du.edu/sites/default/files/documents/publications/building\\_a\\_better\\_bar.pdf](https://iaals.du.edu/sites/default/files/documents/publications/building_a_better_bar.pdf) (last visited Dec. 4, 2023).

<sup>171</sup> *Id.* at 3, 45 (explaining that critical thinking is “the first step in identifying issues”).

<sup>172</sup> *Id.* at 3, 56.

<sup>173</sup> *Id.* at 3, 61-62 (explaining that self-directed learning “requires knowing what you don’t know – as well as possessing the initiative and ingenuity to fill in those gaps”).

<sup>174</sup> See Kalinowski, *supra* note 42, at 109-10. Many reasons have been articulated for the decline in students’ critical thinking ability. Kalinowski, *supra* note 42, at 114. Some reasons include the following: (1) learning in primary education is “geared toward mastery of standardized testing[, which] teaches students *not* to think,” *id.*; (2) “systematic grade inflation at the undergraduate level,” which causes “students’ inflated opinion of their competency,” *id.*; (3) “institutional use of student evaluations as part of tenure decisions[, which] contributes to lower teaching standards,” *id.*; (4) the shift in undergraduate education from a classic liberal arts education to “more professionally-oriented” training toward specific careers, *id.* at 116; (5) “technology [has] chang[ed] the way students learn,” *id.* at 120, so that information is now available online in “small chunks” with distracting links, making “online reading a ‘cognitively strenuous act,’” *id.* at 121; and (6) “The Google Effect,” which is the “automatic forgetting of information that can be found online,” *id.* at 122. More specifically in

*MacCrate Report* ultimately criticized the state of legal education, calling for a re-evaluation of legal education.<sup>175</sup> Specifically, the Report encouraged each law school faculty “to consider how it can best help law students begin to acquire skills and values important to the practice of law” and should be encouraged to “develop or expand instruction in such areas as ‘problem solving.’”<sup>176</sup> Law school faculty also should be aware that:

[T]o be effective, the teaching of lawyering skills and professional values should ordinarily have the following characteristics: development of concepts and theories underlying the skills and values being taught; opportunity for students to perform lawyering tasks with appropriate feedback and self-evaluation; and reflective evaluation of students’ performance by a qualified assessor.<sup>177</sup>

The *Carnegie Report* also criticized the state of legal education, emphasizing the overarching complaint that law schools focus too much on formal and theoretical knowledge without enough connection to “the experience of practice.”<sup>178</sup> This criticism relates to critical thinking and complex legal analysis because lawyers must go beyond formal knowledge to solve complex client problems.<sup>179</sup> Finally, another criticism

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regard to the standardized testing reason, this was a result of the No Child Left Behind Act, 20 U.S.C. § 6319, and the Every Student Succeeds Act, 20 U.S.C. § 6301. Sandra L. Simpson, *Law Students Left Behind: Law Schools’ Role in Remediating the Devastating Effects of Federal Education Policy*, 107 MINN. L. REV. 2561, 2564 (2023). These Acts “push[ed] schools into norm-based, antiquated multiple-choice tests,” which caused students to “bec[o]me passive learners and task-oriented ‘do-ers’ rather than self-directed learners.” *Id.*

<sup>175</sup> The MACCRATE REPORT, *supra* note 156, at 12 (specifically calling for a re-evaluation of skills instruction in law schools).

<sup>176</sup> *Id.*

<sup>177</sup> *Id.*

<sup>178</sup> The CARNEGIE REPORT, *supra* note 160, at 12.

<sup>179</sup> *Id.* at 56-57 (“It is noteworthy that throughout legal education the focus remains on cases rather than clients. The analogy in medical training would be the tension between focusing teaching on disease processes, on the one hand, or on patient care, on the other. The skill of thinking like a lawyer is first learned without the benefit of actual

relates to law faculty implementing “principles of logic,” including deductive reasoning, synthesis, and rule application, but not clarifying the importance of that logic so that students see professors’ teaching methods “as nothing more than their professors’ personal methodological preferences,” and “[t]hey fail to appreciate that these techniques have been tested over thousands of years by history’s greatest thinkers.”<sup>180</sup>

Based on the above reports, there is likely no dispute that critical reading and critical thinking are essential skills for law students and lawyers. However, law professors have been unhappy with students’ critical reading and thinking abilities even before the pandemic.<sup>181</sup> Before the pandemic and declining reading comprehension test scores in younger students, legal scholars highlighted why insufficient reading and thinking skills harmed law students. Specifically, regarding reading, one scholar stated:

Lawyers and judges spend much of the day reading, and they read for all sorts of purposes: examining briefs, discovering facts, reviewing documents, researching legal authority, learning about a client, evaluating an offer, editing a document, studying contracts, preparing for a meeting, or studying a new law. “Much of what we think of as legal work involves reading. Oftentimes, it literally is the work.” Lawyers are not just paid to read; lawyers are paid to critically read extraordinarily well.<sup>182</sup>

At the law school level, reading differs significantly from what students may have done before law school. Students may be reading court opinions and statutes for the first time. This kind of reading to learn the law is “drastically different

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clients . . . more often casting [lawyers] as distanced planners or observers than as interacting participants in legal actions.”)

<sup>180</sup> Kalinowski, *supra* note 42, at 126 (“Law schools purport to teach students to ‘think like lawyers.’ . . . The fact is that modern law curricula do use principles of logic – without denominating them as such.”)

<sup>181</sup> Williams, *supra* note 25, at 186-87 (explaining that, specifically in regard to reading, not much empirical evidence exists, but scholars agree and anecdotal evidence abounds that critical reading skills are declining).

<sup>182</sup> *Id.* at 203-04.

than reading to learn in other disciplines.”<sup>183</sup> “Students’ undergraduate education has not adequately prepared them for the rigorous reading and other academic demands of law school.”<sup>184</sup> This means that students may struggle in law school because they do not arrive with the needed critical reading skills.<sup>185</sup> Students “do not know how to read text closely and have limited practice in reading complex or lengthy pieces of writing. Nor are they accustomed to reading works that demand deep thinking and reflection.”<sup>186</sup> Thus, “[d]eficient critical reading skills can negatively affect the education a law student receives.”<sup>187</sup>

It follows further that, if a law student cannot critically read legal authority, they likely are not adequately critically thinking about that authority either. They cannot analyze statutes and court opinions, synthesize multiple sources of law, evaluate those sources, or apply those sources to complex client factual situations. “[L]egal analysis and writing depends on a careful reading and thoughtful understanding of the authority on which a lawyer relies. Without strong reading and critical thinking skills, it is no surprise that incoming law students have difficulty following a structured analysis and mastering legal writing.”<sup>188</sup> Further, without critical reading skills, students will ultimately lack the ability to engage in “higher-level cognitive processes” needed to problem solve, a skill that all practicing lawyers must have.<sup>189</sup>

Fortunately, with law school professors noticing reading and thinking deficiencies in students, they may begin to emphasize both critical reading and critical thinking instruction. Because reading comprehension is the foundation of critical reading and thinking skills, law school faculty may see even further declines in prospective students’ critical reading and thinking skills, as the current national testing

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<sup>183</sup> *Id.* at 205; Grise, *supra* note 26, at 261 (“Students find that reading cases is like learning a foreign language.”).

<sup>184</sup> Montana, *supra* note 34, at 445.

<sup>185</sup> *Id.*

<sup>186</sup> *Id.* at 433.

<sup>187</sup> Williams, *supra* note 25, at 205.

<sup>188</sup> Montana, *supra* note 34, at 433.

<sup>189</sup> *Id.* at 446-47.

results indicate. Thus, students' critical reading and thinking skills are not likely to be improved any time soon at the pre-law school level. Therefore, with emphasis on critical reading and thinking on the rise in legal education in recent years, it seems even more crucial for law schools to recognize students' deficiencies because they are likely to continue, and perhaps decline, as evidenced by the lowest reading comprehension scores at the elementary, middle, and high school levels in recent years. Consequently, prospective law school students might have even weaker critical reading and critical thinking skills than those referenced in pre-pandemic scholarly work in this area.

As one scholar noted, "[a]s the gap between what entering law students know and what legal educators expect them to know widens, it's time to further study the sources of the problem and adjust not only teaching expectations, but also the manner in which professors teach."<sup>190</sup> Thus, if law school faculty have noticed diminished reading and thinking skills in pre-pandemic students, they likely will notice no improvement in post-pandemic students. They might even see a worsening of these skills. If law schools have not been open to addressing reading and thinking deficiencies before, then now is the time to prepare to address a potential worsening of these skills in future students. The following section provides a roadmap for how law schools can address students expected critical reading and thinking deficiencies so that schools can plan in anticipation of the future wave of students.

#### IV. REMEDIAL INSTRUCTION THAT CAN BE ADAPTED TO A MORE COMPREHENSIVE STRATEGY

Based on the current national reading comprehension scores, law schools can anticipate that future law students may struggle with reading skills and, thus, have critical reading and critical thinking deficiencies. Fortunately, these current scores provide notice to law schools so that law schools can confront and prepare for future students' needs. At some point, law schools can no longer assume that entering students will be

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<sup>190</sup> *Id.* at 433.

armed with solid reading skills.<sup>191</sup> Some students may need to be introduced to these critical reading and thinking for the first time in law school.<sup>192</sup> Even now, with current students, there is a “clear disparity between what entering law students know and what law professors assume they know. . . . Accordingly, law school instruction does not line up with students’ true abilities.”<sup>193</sup> The current educational testing results support the conclusion that these deficiencies are not ending soon and may worsen. Thus, law schools need to recognize these future deficiencies and have a plan to address them.

Law schools also must recognize that, because of the relationship between reading comprehension, critical reading, and critical thinking, students who enter law school with deficiencies in reading will likely struggle at the start of the law school, which sets those students off on the wrong foot, sometimes at a rate that students might not catch up quick enough to succeed in law school. “Many students struggle in law school, particularly in the first year, because they are weak readers. They do not know how to read text closely and have limited practice in reading complex or lengthy pieces of writing. Nor are they accustomed to reading works that demand deep thinking and reflection.”<sup>194</sup> Thus, “when a law student is a weak reader, that student’s overall learning is diminished.”<sup>195</sup> Unfortunately, in the past, these deficiencies may have affected a minority of the student body, “the

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<sup>191</sup> See *id.* at 447-48 (specifically discussing reading skills).

<sup>192</sup> *Id.* at 448.

<sup>193</sup> *Id.* (“The difference in students’ actual reading competencies and what they need to successfully navigate the first year of law school is most striking. Law professors build their instruction on a false belief that new law students have the foundation in critical reading and stamina to get through complex and lengthy reading assignments.”). See also Laura P. Graham, *Generation Z Goes to Law School: Teaching and Reaching Law Students in the Post-Millennial Generation*, 41 U. ARK. LITTLE ROCK L. REV. 29, 72 (2018) (stating that “many law professors overestimate students’ reading ability”).

<sup>194</sup> *Id.* at 433.

<sup>195</sup> *Id.* at 446.

increasing academic underpreparedness is becoming systemic rather than singular," even now.<sup>196</sup>

Fortunately, law professors can use reading comprehension and critical reading strategies to help students develop and master these skills.<sup>197</sup> With critical thinking, a "skills approach to critical thinking" is possible.<sup>198</sup> "Critical-thinking instruction is predicated on two assumptions: (a) that there are clearly identifiable and definable thinking skills that students can be taught to recognize and apply appropriately and (b) if these thinking skills are recognized and applied, the students will be more effective thinkers."<sup>199</sup> The following subsections explore a current "remedial" analysis and writing course, which can be tailored in the future to help all students, not only students who need remedial help.

#### A. DESCRIPTION OF AN UPPER-LEVEL REMEDIAL WRITING COURSE THAT INCLUDES CRITICAL READING AND ANALYSIS

Ideally, in the first year of law school, students are introduced to critical thinking even as early as orientation.<sup>200</sup> Further, academic support in the first year of law school can assist struggling students.<sup>201</sup> Finally, the first-year legal analysis and writing course introduces students to critical reading and

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<sup>196</sup> Stuart & Vance, *supra* note 48, at 46.

<sup>197</sup> See Halpern, *supra* note 46, at 452. See also *infra* Sections IV.A. and IV.B.

<sup>198</sup> Halpern, *supra* note 46, at 452.

<sup>199</sup> *Id.*

<sup>200</sup> Kalinowski, *supra* note 42, at 140 ("The obvious moment to begin exposing students to a paradigmatic system of thinking is during orientation. . . . Orientation programs introducing logic should be straightforward and unintimidating. The goal is to build a solid foundation upon which to build the thinking processes students will encounter in the first weeks of law school and beyond.").

<sup>201</sup> See Montana, *supra* note 34, at 448 ("Academic support, though certainly beneficial and still necessary to enhancing students' academic success, is not enough. Law professors across the curriculum need to take part in helping students become more expert readers. They can fix the reading gap by making simple changes to their teaching methodologies and reading assignments.").



thinking as they work on their writing assignments. “[L]egal writing professors are on the front lines of recognizing—and attempting to mitigate—shortcomings in law students’ reasoning.”<sup>202</sup> Unfortunately, orientation, academic support, and legal analysis and writing courses are not enough for some students to develop strong reading and thinking skills in the first year of law school.

Regarding students’ performance in the first-year legal analysis and writing course, weak students are easily identifiable based on their grades. However, what makes a student a weak writer? The academic support program at my law school often looks to the legal writing professors for guidance in identifying students who need early remedial help before finals based on their performance on the fall semester first-year legal writing assignments. This practice makes sense because legal writing assignments are client-based problems where students need to analyze the law, apply the law to client fact patterns, and reach predictions or make arguments based on applying the law to the facts. Students utilize critical reading and thinking skills to accomplish these tasks, so legal writing professors are often the first to identify students with deficiencies, not just in writing, but in reading and thinking more broadly.

When the administration at my law school began to talk about introducing a remedial writing course, the discussion arose about whether a student is a weak writer based on poor basic writing skills. Or is the problem more profound, such that the issue is more about whether the student has poor reading and/or analytical skills? The answer is that the problem is the latter, in my opinion. Students typically get a low grade not merely because they cannot punctuate a sentence correctly or because their grammar is inaccurate. Students usually get a low grade because their analysis is not on the right track, incomplete, or not sufficiently in-depth. Therefore, saying that a student is a weak writer is incorrect. More accurately, a student is a weak reader and thinker.

As I developed an upper-level writing course for students needing remedial help after the first year, I decided that the course needed to be more than a grammar and

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<sup>202</sup> Kalinowski, *supra* note 42, at 145.

punctuation course. The course needed to focus heavily on reading and analysis as the foundation for solid legal writing. This “remedial” course is called “Writing and Editing for Lawyers.” The course description is as follows:

This course is designed to offer an intensive writing experience to improve students’ *legal analysis*, writing, and editing skills. Students will be required to write legal memoranda *responsive to legal and factual questions*. Students will practice *written analysis* and organization. Students will learn how to write sentences that are accurate, brief, clear, and precise. Further, the rules of grammar, punctuation, usage, tone, and style will be reinforced.<sup>203</sup>

As evident, analysis is a vital component of the course above and beyond writing. The course is two credits and offered on a pass or fail basis,<sup>204</sup> and students who performed poorly in the first-year legal writing course are highly encouraged to take the course in the upper-level curriculum.

In terms of content, the course takes students through two sets of client problems. For one of the problems, students write a discussion section of an interoffice memorandum. For the other, they write a complete interoffice memorandum. Rather than leaping directly into writing the memoranda, the process involves dedicating considerable time to covering reading and analytical skills. The course spends equal time in the pre-writing process – reading and thinking – compared

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<sup>203</sup> *Course Descriptions*, PENN STATE L.,

<https://pennstatelaw.psu.edu/academics/jd-program/courses> (last visited Dec. 4, 2023) (emphasis added).

<sup>204</sup> The remedial course is offered on a pass/fail basis to encourage students to take the course without ramifications of a negative impact on their grades. Instead, the focus of the course is learning. Students can concentrate on improving their skills without worrying about points. In fact, students are assessed by showing improvement throughout the course. Therefore, the weakest student in the class had to show some improvement in their abilities throughout the two assignments, and they passed even if they did not get to the level of achieving an “A” grade level of work. Similarly, even if a stronger student did take the course, they had to show improvement from where they started. Thus, the course is designed so that, regardless of their starting points, every student should develop in terms of learning and improving their analytical skills.

to the actual writing process. This balance of time helps students to see that the pre-writing process is as important as the writing process itself, if not even more important.

The class dedicates time to model critical reading and thinking skills for each problem. Students first read the assigned legal sources independently, then class time is dedicated to modeling critical reading skills. Modeling involves being explicit about the purpose of the task assigned, showing examples of the task, and summarizing the task afterward. For instance, in a doctrinal course, scholars suggest that students will understand the material better if professors are “explicit about its relevance to the subject being taught and its relationship with past and future readings,”<sup>205</sup> if professors “create explicit objectives for each class and share them with the students beforehand,”<sup>206</sup> and if professors “explain and demonstrate how students should approach the material they assign.”<sup>207</sup> In a similar explanation of this modeling technique, it has been stated that teachers should “demonstrate how students should approach assigned material [and] . . . share with their students how they recommend that students should approach reading and dissecting cases and statutes.”<sup>208</sup> By professors showing students how to read cases and statutes using their own expert strategies, students eventually will “maximize both reading efficiency and reading comprehension.”<sup>209</sup>

Modeling is similarly helpful in a skills course where students must read and analyze legal authority to apply that authority to a set of client facts. In the remedial course, modeling the reading stages is an early aspect. In the pre-reading stage, I discuss the purpose for which students are conducting our reading because they are reading the materials with a client’s situation in mind, which then helps students focus on the most relevant information in the sources.<sup>210</sup>

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<sup>205</sup> Montana, *supra* note 34, at 448-49.

<sup>206</sup> *Id.* at 449.

<sup>207</sup> *Id.* at 451.

<sup>208</sup> Graham, *supra* note 193, at 73.

<sup>209</sup> *Id.* See also Montana, *supra* note 34, at 448-50 (discussing the pre-reading, active reading, and post-reading stages of critical reading).

<sup>210</sup> See Dalton, *supra* note 31, at 435.

Modeling active reading is also a useful in-class technique, explicitly showing students how to annotate and highlight key parts of the legal sources.<sup>211</sup> Class time is then devoted to questioning students about their reading process so that they can reflect on how they read the sources and whether they missed any essential information. By modeling and explicitly discussing the reading process and providing tips to become a more effective reader, students can more fully understand the sources, which later helps them draft the writing assignments.

A second technique discussed in academia is “scaffolding,” also used in the remedial course. Scaffolding can include breaking projects “up into smaller chunks so that students learn how to manage their time.”<sup>212</sup> Another “type of scaffolded instruction is a teaching strategy sometimes referred to as ‘I do--we do--you do.’ Scaffolds can also refer to diagrams, graphs, or other visual organizers that support students’ developing knowledge.”<sup>213</sup> Finally, scaffolding can mean that assignments increase in difficulty over the semester.<sup>214</sup>

The remedial course utilizes scaffolding in several ways. The student breaks down the assignments into smaller parts and submits the stages of their analysis. During these stages, students use worksheets and other visual organizational techniques. For example, students must complete worksheets identifying key information from court opinions and legally relevant client facts. The rule worksheets use the critical information from the court opinions to develop a rule from the case. They also use the worksheets to work on their rule application skills to compare and contrast the legal authority to the relevant client facts to help them reach a prediction in the client’s case. They also use the worksheets to craft synthesized rules from a series of related cases by using the worksheets to see commonalities across several opinions. Using these worksheets, students see how incomplete analysis can result in writing an incomplete or incorrect rule. Students spend class

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<sup>211</sup> *Id.*

<sup>212</sup> Simpson, *supra* note 174, at 2589.

<sup>213</sup> Beth A. Brennan, *Explicit Instruction in Legal Education: Boon or Spoon?*, 52 U. MEM. L. REV. 1, 49 (2021).

<sup>214</sup> Graham, *supra* note 193, at 73 (“[L]aw professors should scaffold reading assignments so that students can adapt gradually to the rigor of close, active reading.”).

time reviewing these worksheets and identifying weaknesses in their analysis notes. Also, modeling shows students what a more complete or accurate analysis would look like. Additionally, the work increases in difficulty throughout the semester as students work more independently as the semester progresses and as students work on a more complex legal issue in the second writing assignment.

The course begins drafting the actual written analysis only after spending significant time on students' reading and analysis. In terms of writing, the course primarily reviews topics covered in the first-year writing course in terms of legal writing organization, rule explanation, and rule application. The course also covers basic writing and citation skills. However, in terms of substantive content, now that students have a stronger grasp of the reading and thinking behind the writing, their written analysis is more robust, with more legal support and in-depth explanation. After the students develop their written analysis, they work on smaller writing issues, like grammar, punctuation, and citation format.

A final technique used in the remedial class is multiple assessments that provide group and individual feedback opportunities. As mentioned, students complete worksheets before class, and in-class feedback and discussion are core assessment components. I could view the worksheets before class to assess the prominent weaknesses of students' analysis. Additionally, as students drafted the various components of the discussion section and the memorandum, I provided individual written feedback on the drafts. Students utilized the feedback to make edits for the final submission. Further, I provided students with individual conference opportunities so they could ask questions about the feedback and provide even more critiques. Through these writing assignments, I could assess each student's improvement.

By the end of the course, students stated that they felt like they were not only stronger writers but also stronger law students in general. They were more prepared to read in their other courses and for their internships and jobs. They felt that their confidence in their reading and thinking abilities helped them in different classes and work experiences.

## B. ANTICIPATING FUTURE LAW STUDENTS' NEEDS AND

## ADDRESSING THOSE NEEDS

The “remedial” Writing and Editing for Lawyers course demonstrated that modeling, scaffolding, and assessment approaches work. Thus, all law professors who teach first-year courses could adopt the techniques of modeling, scaffolding, and assessment of assignments. The remedial course described above is a fantastic tool for addressing current students’ remedial needs. Unfortunately, these remedial needs may be more systemic in the future, as evidenced by recent national reading comprehension test scores. What now may be considered remedial may become a more common issue in the future. Therefore, instead of waiting to identify weak students in the first year and addressing the concerns in the second or third year of law school, law schools might anticipate addressing these needs in the first year.

For modeling, first-year professors could be explicit regarding their teaching methods so that students are not kept in the dark about the purpose of the Socratic method, which many doctrinal law classes use.<sup>215</sup> Modeling also could include explicit communication of the purpose for which the students

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<sup>215</sup> One definition of the Socratic method is: “[S]tudent analysis of cases led by a teacher, who calls on students to articulate gradually deeper understandings of a legal doctrine or theory. Socratic learning requires students to think on the spot, answer precisely, and take intellectual risks.” Elizabeth G. Porter, *Implementing Effective Education in Specific Contexts*, in BUILDING ON BEST PRACTICES: TRANSFORMING LEGAL EDUCATION IN A CHANGING WORLD 101 (Lisa Radtke Bliss et al. eds. 2015). In this article, I am not advocating for discontinuing the Socratic method. Rather, these modeling ideas simply revise how the Socratic method could still operate, but with some more explicit explanation at the start of the first semester of law school. See generally Kalinowski, *supra* note 42, at 141-42 (discussing some shortcomings of the Socratic method in that students are not explained the goals of the teaching method); Jamie R. Abrams, *Legal Education’s Curricular Tipping Point Toward Inclusive Socratic Teaching*, 49 HOFSTRA L. REV. 897, 926 (2021) (explaining that the author was not advocating “for an abandonment of Socratic teaching, but rather a reframing of the Socratic method around a student-centered, skills-centered, client-centered, and community-centered delivery”).

are doing the reading with the content of early lessons.<sup>216</sup> This can consist of reviewing course objectives as those objectives relate to the specific reading assigned for a given class.<sup>217</sup> Professors also can talk about effective reading strategies and the difference between law school reading and reading in other disciplines, and they can ask carefully crafted questions to assess students' basic understanding of the reading.<sup>218</sup>

Further, first-year professors could scaffold assignments, so students become increasingly more independent with their reading and analytical skills. Professors can break down assignments into smaller, more discrete sections.<sup>219</sup> Instead of simply reading, professors can give a clear framework, including worksheets, to complete before class.<sup>220</sup> Professors also can have earlier reading on less complicated topics to demonstrate reading and thinking skills and then have students work more independently on more complex topics as the semester proceeds.<sup>221</sup>

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<sup>216</sup> Montana, *supra* note 34, at 449 (“[R]ather than demanding that students figure out the relevancy of a text on their own or assuming they will get the context from the syllabus, a textbook’s table of contents, or elsewhere, professors should take the time to outline the relevancy of the material they assign and point out its context relative to other reading assignments.”). See also Dewitz, *Legal Education*, *supra* note 7, at 236; Brennan, *supra* note 213, at 48; Dalton, *supra* note 31, at 435; Graham, *supra* note 193, at 73.

<sup>217</sup> Montana, *supra* note 34, at 450.

<sup>218</sup> *Id.* at 451-52; Dewitz, *Legal Education*, *supra* note 7, at 239, 243-45.

<sup>219</sup> Simpson, *supra* note 174, at 2589 (“[L]aw professors can begin the semester by discussing outlining and synthesizing the cases studied in the class. In this way, the professor can encourage students to set goals to start working on their outlines, can offer to review outlines, and can dedicate class time to showing students how the cases relate to each other. This scaffolding models self-regulating behavior and improves law students’ skills.”).

<sup>220</sup> Dewitz, *Legal Education*, *supra* note 7, at 237.

<sup>221</sup> Brennan, *supra* note 213, at 49; Graham, *supra* note 193, at 73

(explaining that, in the context of reading instruction, “law professors should scaffold reading assignments so that students can adapt gradually to the rigor of close, active reading[;] [b]y starting them out with short reading assignments, and then gradually increasing the amount of reading, professors increase the likelihood

Finally, assessment was an essential aspect of the remedial class described above. However, as a writing course, the enrollment was small enough for more frequent individual feedback and assessments. Nevertheless, professors could add assessment tools to help their students with critical reading and thinking skills in a larger first-year doctrinal course. “Assessment has the power to invoke different types of learning and to deepen cognitive engagement, increasing critical thinking and self-regulation.”<sup>222</sup> Different types of assessments allow for increased critical thinking because they can go beyond promoting surface learning and extend to deeper thinking.<sup>223</sup> For example, multiple-choice quizzes can include explanations of the correct answers to show after submission of the quiz.<sup>224</sup> Multiple choice assessments, in-class short writing prompts, and in-class surveys are perfect for starting surface learning, leading to deeper thinking.<sup>225</sup>

Using multiple forms of assessment conforms to the American Bar Association (“ABA”) Standard 314, which requires law schools to use both formative and summative assessments.<sup>226</sup> Thus, as students are ready to deepen their thinking, professors can use other kinds of assessments in addition to multiple choice quizzes and final exams, such as “presentations in class, self-assessing their own work, [] assessing peer work,” “[s]elf-reflection assignments,” and connecting the topic of the class to “reflect real-world

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that students will develop the habit of reading slowly and deeply, rather than reading quickly or skimming”).

<sup>222</sup> Simpson, *supra* note 174, at 2608.

<sup>223</sup> *Id.* at 2611.

<sup>224</sup> *Id.* at 2611-12 (“This type of learning and assessment should continue in the classroom, as surface-level learning is a necessary step that allows students to move into deeper learning. However, these types of assessments should be used sparingly as, in general, multiple-choice assessments encourage recall and do not develop a student’s deep learning. Thus, multiple-choice tests negatively impact a student’s ability to critically analyze and think.”).

<sup>225</sup> *Id.*

<sup>226</sup> AM. BAR ASS’N, ABA STANDARDS AND RULES OF PROCEDURE FOR APPROVAL OF LAW SCHOOLS 26 (2023) (Standard 314 Assessment of Student Learning).



contexts.”<sup>227</sup>

Receiving feedback is also vital on assessments, so students can learn from mistakes as the professor identifies those mistakes.<sup>228</sup> Of course, individual feedback in a large doctrinal course can be difficult to provide, but feedback need not be individualized. Professors can provide sample answers to which the students can compare their answers. Professors can use peer feedback or group feedback. Professors also can utilize rubrics to streamline feedback or have pre-prepared comments that can be cut and pasted as feedback. Even if the feedback is not as in-depth as a writing course, some feedback is better than nothing. As Professor Simpson stated: “Expecting law students to perform well on an end-of-the-semester exam without any practice is like expecting a sixteen-year-old child to pass a driver’s test without ever getting behind the wheel of a vehicle to practice.”<sup>229</sup>

In sum, if the current national test scores indicate the future of law students’ abilities, then law schools will need to adapt from a “remedial” mentality to a more systemic mentality of helping all students succeed in developing strong reading and thinking skills. This may be a question of legal education reform, which is certainly not a new subject.<sup>230</sup> Essentially, the

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<sup>227</sup> Simpson, *supra* note 174, at 2612-13.

<sup>228</sup> *Id.* at 2613-14.

<sup>229</sup> *Id.* See also Abrams, *supra* note 215, at 931 (“Using formative assessment techniques to move students incrementally through the development of substantive rules and analytic skills, packaged around sensitization to lawyering skills like research, writing, advocacy, civility, cultural competence, and client counseling.”).

<sup>230</sup> See ACADEMICALLY ADRIFT, *supra* note 150, at 129 (stating that “academically rigorous instruction is associated with improved performance on tasks requiring critical thinking, complex reasoning, and written communication”); The MACCRATE REPORT, *supra* note 156; The CARNEGIE REPORT, *supra* note 160; BEST PRACTICES, *supra* note 164; Grise, *supra* note 26, at 303 (explaining that “[c]ritical reading instruction needs to take place before and during the first semester of law school[; i]t is also important to incorporate critical reading instruction throughout the law school curriculum”); Williams, *supra* note 25, at 182, 211, 220 (explaining that “only one solution” is insufficient to correct deficiencies in reading, and buy-in from all stakeholders in a law school is needed).

issue may be educating professors on these modeling, scaffolding, and assessment techniques so that they can use them effectively in both skills and doctrinal courses.<sup>231</sup> However, as can be seen, the modeling, scaffolding, and assessments, which worked in the remedial setting, should also be effective more broadly across the first-year curriculum. These techniques should give students a more substantial and earlier understanding of legal analysis in their law school careers.

## V. CONCLUSION

The most recent national reading comprehension test results show a significant decrease in scores post-pandemic in elementary, middle, and high school students. Law schools should plan if future law students' deficiencies in reading comprehension are not resolved in the years before the current elementary, middle, and high school students enter law school. Because reading comprehension is directly related to critical reading and critical thinking – both necessary skills for law students and attorneys – it will be up to law schools to remedy those weaknesses before students enter legal practice. A remedial legal analysis and writing course at the upper level is a good roadmap for law schools to implement across the curriculum to address these anticipated needs of future law students. If schools do not treat deficient reading and thinking skills as “remedial” issues, there would be less need for a remedial class such as Writing and Editing for Lawyers in the upper-level course curriculum. Thus, if law schools plant the tree of focusing early on critical reading and thinking skills, then future students can bask under the shade of forward thinking and planning.

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<sup>231</sup> Simpson, *supra* note 174, at 2601 (“Law professors’ training and interest in learning new teaching methods aimed at honing cognitive adaptability, intrinsic motivation, self-regulation, and critical thinking is integral to creating a classroom where these skills are taught to law students.”). It is explained further that schools will need to train faculty members about “different teaching modalities and encourage active learning.” *Id.* at 2603.