

Minds and Levers: Reflections on Howard Gardner's *Changing Minds*

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Teaching means changing minds—that is, promoting significant, conscious shifts in thinking accompanied by corresponding shifts in behavior.² This is how cognitive psychologist and educator Howard Gardner, of Harvard University, defines the teacher's task in his book *Changing Minds: The Art and Science of Changing Our Own and Other People's Minds*.³

The book builds on Gardner's influential theory of multiple intelligences.⁴ This theory rejects the monolithic concept of a single-entity intelligence, measurable for example in "IQ" gradients.⁵ Gardner defines intelligence more broadly as "the ability to solve problems or fashion products that are of consequence in a particular cultural setting or community."⁶ This redefinition permits recognition

of "noncanonical" intelligences such as musical, spatial, interpersonal, and bodily-kinesthetic intelligences.⁷

In *Changing Minds*, Gardner shows how great teachers and leaders have engaged multiple intelligences and produced mind changes in individuals, schools, corporations, and even nations. Schools, Gardner writes, are "explicitly charged with the changing of minds."⁸ Legal educators tend not to use the phrase *mind change*. It is, however, simply a brasher formulation of a concept that is central to legal education. Law schools claim to teach students to "think like a lawyer" and to perform accordingly.⁹ A legal writing course, for example, challenges the student to understand legal reasoning and advocacy and to craft legal documents accordingly. In Gardner's terms, therefore, a legal writing professor strives to change minds: to alter how a student conceives of law and writing and how, correspondingly, the student produces written documents.

This essay will describe what Gardner calls "levers" of mind change. It then will briefly examine the workings of those levers in legal writing pedagogy. Finally it will address the ethics of mind change and respond to a challenge Gardner poses in *Changing Minds*: that we face ourselves in the mirror and ask hard questions about the value of teaching legal writing.¹⁰

¹ I thank Helene Shapo and Ann Harrison for helpful comments on drafts of this review.

² Howard Gardner, *Changing Minds: The Art and Science of Changing Our Own and Other People's Minds* 243 (2004) (hereinafter *Changing Minds*).

³ *Id.*

⁴ See, e.g., Howard Gardner, *Multiple Intelligences: The Theory in Practice* (1993); Kirsten A. Dauphinais, *Valuing and Nurturing Multiple Intelligences in Legal Education: A Paradigm Shift*, 11 Wash. & Lee Race & Ethnic Anc. L.J. 1, 2 (2005) (arguing in favor of a "more expansive approach to recognizing and evaluating student capabilities"); M.H. Sam Jacobson, *Learning Styles and Lawyering: Using Learning Theory to Organize Thinking and Writing*, 2 J. Ass'n Legal Writing Directors 27, 32–33 (2004).

⁵ See Howard Gardner, *Intelligence Reframed* 3 (1999) (explaining the theory and asserting that "intelligence is too important to be left to the intelligence testers").

⁶ *Id.* at 15.

⁷ *Changing Minds* at 29–36.

⁸ *Id.* at 135.

⁹ Cf. Nancy B. Rapoport, *Is "Thinking Like a Lawyer" Really What We Want to Teach?*, 1 J. Ass'n Legal Writing Directors 91, 102, 108 (2001) (arguing that "[t]he mantra of legal education—that we teach our students to think like lawyers—is no longer sufficient" because "[n]o practicing lawyer would consider the skill of thinking ... enough").

¹⁰ See *id.* at 207; note 26 and accompanying text.

A. The Seven Levers of Mind Change

Gardner describes mind changes in terms of both thinking and behavior.¹¹ First, we significantly alter our “mental representations.”¹² These are “the particular way[s] in which a person perceives, codes, retains, and accesses information”¹³—such as “ideas, concepts, skills, [or] stories” that are expressed in forms such as language, symbols, and various media.¹⁴ Mental representations thus might include an artist’s vision of a forthcoming creation, Darwin’s theory of evolution, and an individual’s religious beliefs. Second, we significantly alter conduct. The shift in our mental representations prompts us “to act on the basis of this shift.”¹⁵ For example, a religious conversion yields different behavior, and a scholar who has revised her fundamental conception of a subject teaches the subject differently.¹⁶

Mind changes, Gardner argues, depend largely on seven “factors” or “levers.” He identifies each using a word that start with “re.” Six levers that facilitate mind change are: *reason*; *research*; *resonance*; *redescription*; *resources*; and *real world events*.¹⁷ By contrast, the seventh lever, *resistances*, typically impedes mind change.

Gardner’s first three facilitating levers are familiar components of effective rhetoric:

1. *Reason*, Gardner writes, is the identifying and weighing of relevant factors followed by assessment of the overall whole.¹⁸
2. *Research* is “the collection of relevant data.”¹⁹

3. *Resonance* concerns feelings.²⁰ “A view, idea, or perspective resonates to the extent that it feels right to an individual, seems to fit the current situation, and convinces the person that further considerations are superfluous.”²¹ A leader seeking to change a colleague’s mind might establish resonance, for example, by emphasizing common bonds between the two, engaging the colleague in a common enterprise, and connecting intellectually and emotionally by asking questions, listening, “and following up appropriately.”²²

The fourth lever, *redescription*, or more formally *representational redescription*, means representation of an idea “in a number of different forms, with these forms reinforcing one another.”²³ These “different mental versions” may be, for example, “linguistic, numerical, and graphic”—as when a principle is described in words, sets of numbers, and charts or graphs.²⁴ Redescription, Gardner emphasizes, is a teacher’s vital lever. “Particularly when it comes to matters of instruction . . . [,] the potential for expressing the desired lesson in many compatible formats is crucial.”²⁵ As recognition of multiple intelligences would lead us to expect, “multiple versions of the same point constitute an extremely powerful way in which to change minds.”²⁶ Moreover, “[t]here is no royal road” to learning.²⁷ Rather “there are several royal roads” to it, “with the most versatile teachers serving as the most reliable guides.”²⁸ Hence

¹¹ *Changing Minds* at 1.

¹² *Id.* at 209.

¹³ *Id.* at 5.

¹⁴ *Id.* at 209.

¹⁵ *Id.* at 1.

¹⁶ *Id.* at 186–93.

¹⁷ *Id.* at 15–18 (Gardner calls the fifth lever *resources and rewards*, but rewards seem to be one set of resources, and omitting the term avoids a confusingly plural title for a singular lever).

¹⁸ *Id.* at 15.

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.*

²² *Id.* at 160.

²³ *Id.* at 16.

²⁴ *Id.*

²⁵ *Id.*

²⁶ *Id.* at 14.

²⁷ *Id.* at 141.

²⁸ *Id.*

redescription “is probably the most important way of changing the minds of students.”²⁹

These four facilitating levers—*reason*, *research*, *resonance*, and *redescription*—function best on minds open to change. Whether a mind is open, however, may depend on the remaining three levers, which can be exceptionally difficult for a teacher to manipulate.

The fifth lever is *resources*, including in particular *rewards*. These sometimes lie beyond a teacher’s control. But if a teacher can manage to align costs and benefits well, Gardner writes, “the balance might tip” in favor of a change of mind.³⁰

Gardner describes for example the resources of time and energy invested in dream analysis by psychotherapist Erik Erikson and a patient. The investment yielded an interpretation around which Erikson could structure a successful treatment.³¹

Gardner also describes influential long-term political and economic *rewards* that former Prime Minister Margaret Thatcher offered Britons to help them accept the wrenching reforms she implemented.³²

The sixth lever is *real world events*. These include traumas—“wars, hurricanes, terrorist attacks, [and] economic depressions”—and boons—“eras of peace and plenty” or “the availability of medical treatments.”³³ Those who would change minds, Gardner writes, cannot control but must exploit such events. One of Gardner’s examples comes from the streamlining and reshaping of the British oil company BP in the 1990s. The company’s leaders, Gardner writes, effectively responded to and used as motivation “the threat that oil supplies will be seized or that [the] company will collapse altogether.”³⁴

Finally, the seventh lever, *resistances*, may reduce open-mindedness. Do not underestimate their power, Gardner warns. Individuals tend to have many “strong views and perspectives that are resistant to change.”³⁵ Sometimes, however, resistances indirectly facilitate mind change because a struggle against them may stimulate a change of one’s own mind.³⁶

The stage is best set for mind change, Gardner writes, when (1) the six facilitating levers “operate in consort” or “push in one direction” and (2) “*resistances* can be identified and successfully countered.”³⁷ Gardner exhorts teachers in scholarly disciplines to focus mainly on three tasks:

1. **Identify and confront the *resistances*.**

The resistances may stem from students’ misconceptions about content (for example failure to distinguish holding from dictum) or method (for example failure to explain sufficiently one’s analytical conclusions).³⁸ Effective teachers give students “regular and systematic” demonstration of “their ‘natural’ but typically inadequate modes and conclusions of thought.”³⁹

2. **Help students study a “set of rich examples.”**⁴⁰ Examples are results of *research*, and they should engage the students’ *reason* and aim for *resonance*. Effective teachers present positive examples that help students “to appreciate the ways in which [experts in the discipline] conceive of and interpret such seminal cases.”⁴¹

3. **Use many *representational redescriptions*.**

Redescription, the vitally important fourth

²⁹ *Id.* at 140.

³⁰ *Id.* at 16.

³¹ *Id.* at 149–55.

³² *Id.* at 100.

³³ *Id.* at 17.

³⁴ *Id.* at 145.

³⁵ *Id.* at 17–18.

³⁶ *Id.* at 125.

³⁷ *Id.* at 18, 211.

³⁸ *Id.* at 139.

³⁹ *Id.*

⁴⁰ *Id.* at 140.

⁴¹ *Id.*

lever of mind change, gives students multiple ways to grasp concepts and methods.⁴²

In short, Gardner writes, we must “stamp out the resistance, “search for the resonance,” and use a variety of redescription.”⁴³

B. The Levers of Mind Change in Legal Writing Pedagogy

Gardner’s *Changing Minds* can help us comprehend the daunting nature of our task. That alone makes the book worth reading. Gardner also, however, offers a useful framework for evaluating our students’ learning environment. It can in particular help inspire us to generate teaching techniques, identify obstacles to learning, and develop strategies for minimizing those obstacles.

Legal writing professors typically use Gardner’s first three, rhetorical levers. First, we appeal to *reason*. For example, we explain that many lawyers are in essence professional writers.⁴⁴ Second, we employ *research*. For example, we share information about how judges respond to poorly edited briefs, unethical statements, and the like.⁴⁵ Our use of research is increasing, too, as the amount and quality of legal writing scholarship increases.⁴⁶ Third, we strive to make our lessons *resonate* emotionally with our students. We may, for example, assign reading or writing about issues selected for their ability to engage students’ hearts as well as minds. In addition, we cultivate ethos—the credible, experienced, caring character that helps students open their minds and view us as trustworthy mentors. So, for example, we share our own stories of learning, treat students respectfully

as young attorneys, and perhaps even reach out to them using art, architecture, and music.⁴⁷

Gardner’s fourth lever of mind change, *redescriptions*, presents the most challenge and opportunity for legal writing teachers. How can we convey key ideas to students in a variety of reinforcing forms? This question seems to help energize every meeting devoted to the quest for excellence in legal writing pedagogy. Legal writing professors do not rely solely on “how-to” essays and lectures. We instead add many useful *redescriptions*, for example:

- diagrams that make visible the logical steps required by a rule;⁴⁸
- charts that help students to organize holdings, explanations, policy statements, and the like, as well as to “annotate” a legal rule’s distinct elements or factors;⁴⁹
- “organizational paradigms” often expressed in the shorthand of acronyms (IRAC, CRuPAC, etc.) and color-coded by students who complete “self-graded drafts”;⁵⁰ and
- interactive role-playing stories that simulate legal decision making.⁵¹

⁴⁷ E.g., Michael R. Smith, *Advanced Legal Writing* (2002) (addressing use of literary references in persuasive writing); Jill J. Ramsfield, *The Law as Architecture: Building Legal Documents* (2000); Charles R. Calleros, *Reading, Writing, and Rhythm: A Whimsical, Musical Way of Thinking about Teaching Legal Method and Writing*, 5 *Legal Writing* 1 (1999).

⁴⁸ E.g., Anne Enquist, *That Old Friend, the Tree-Branching Diagram*, 13 *Perspectives: Teaching Legal Res. & Writing* 24 (2004).

⁴⁹ E.g., Craig T. Smith, *Synergy and Synthesis: Teaming “Socratic Method” with Computers and Data Projectors to Teach Synthesis to Beginning Law Students*, 7 *Legal Writing* 113 (2001); M.H. Sam Jacobson, *How Law Students Absorb Information: Determining Modality in Learning Style*, 8 *Legal Writing* 175 (2002).

⁵⁰ Neumann Jr., *supra* note 44 at 101; Mary Beth Beazley, *A Practical Guide to Appellate Advocacy* (2002). See also, e.g., articles on IRAC in Volume 10, No. 1, of *Second Draft* (available at <www.lwionline.org/publications/seconddraft.asp>, visited May 11, 2005).

⁵¹ E.g., Charles R. Calleros, *Using Classroom Demonstrations in Familiar Nonlegal Contexts to Introduce New Students to Unfamiliar Concepts of Legal Method and Analysis*, 7 *Legal Writing* 37 (2001) (describing various exercises, including one in which a grocer’s employee must determine where to place various fruits and vegetables); Jane Kent Gionfriddo, *Using Fruit to Teach Analogy*, *Second Draft*, Nov. 1997, at 4.

⁴² *Id.*

⁴³ *Id.* at 145.

⁴⁴ Richard K. Neumann Jr., *Legal Reasoning and Legal Writing* 53–56 (5th ed. 2005).

⁴⁵ E.g., Judith D. Fischer, *Pleasing the Court: Writing Ethical and Effective Briefs* (2005).

⁴⁶ See Linda H. Edwards & Terrill Pollman, *Scholarship by Legal Writing Professors: New Voices In the Legal Academy*, *Legal Writing* _ (forthcoming 2006).

Gardner's fifth and sixth levers of mind change, *resources* (including *rewards*) and *real world events*, often are intimately related. Events affect whether, how, and from whom students learn legal writing. They also affect how motivated students are to learn, and what rewards await them if they learn well. Such events include:

- the edicts of one's own faculty and deans;
- the exemplary work of pioneering legal writing professors;
- changes in law school accreditation standards and bar admission criteria; and
- descriptions by judges and lawyers of the characteristics they value most in law school graduates.

Surveying such events, and the resources and rewards that you and your law school invest in students' learning, is instructive—and perhaps sobering. What messages, for example, does your law school give students about the relative importance of legal writing in the curriculum? What credits, evaluations, and awards can they gain? What weight do those factors, and your status and title, have when you write recommendations to help students gain employment? Who invests in your program, and who champions it publicly? The more favorably we can answer such questions, the more likely we will succeed, if Gardner is correct, in changing our students' minds.

Consequently, the work of teaching includes exploiting real-world events, in particular to improve the resources and rewards available to students: increasing credits for legal writing courses, for example, or improving the stature of legal writing courses, faculty, published scholars, and top students. The most successful writing professors, and organizations such as the Legal Writing Institute and the Association of Legal Writing Directors, engage continuously in such work.

Finally, Gardner's seventh lever, *resistances*, is familiar to every legal writing professor. No one is spared the task of pushing, without cease, against resistances. Many resistances reside obstinately

within the students. They tend to remind us, for example, that they already “know how to write.” What they “know,” however, may disserve their readers. A novice may, for example, arrive at law school with an ideal conception of an effective written document. This ideal will almost certainly be tailored to readers who lack law training. A novice may imagine that an analytical legal memorandum is closely akin to a journalistic feature story, a report on a chemistry experiment, or an introspective essay written for an undergraduate English course. The student may “know” also that a writer sounds intelligent if most of her sentences are complex, in passive voice, and peppered with polysyllabic words. Such knowledge tempts students to believe that they need not *unlearn* prior understandings. We nonetheless challenge them to abandon aspects of their ideal conception. We insist that they substitute for these a set of conceptions suited to law-trained readers. We also demand that they change their writing correspondingly. No wonder they struggle.

Resistances *within* students may be the most mysterious obstacles we face. But they are not always the most frustrating. Others are structural. Consider again the questions above regarding real world events and resources. For every favorable response, one can easily find gloomier responses among U.S. law schools. The profession values legal writing instruction highly. Not all law faculties, however, have created environments that optimize student learning of legal writing. Indeed, some law schools unwittingly foster resistance to such learning. They may, for example, indirectly communicate to students, through course credits, instructor status, and the like, that learning legal writing is less important than other types of learning.

Nonetheless, optimism deserves to prevail. Legal writing professors can find encouraging developments with respect to each of Gardner's seven levers of mind change. We continue to witness improvements in accreditation standards, legal writing curricula, and legal writing scholarship. The fourth lever in particular—the *redescriptions* that “convey the desired shift [in thinking] in a multiplicity of formats” and are hallmarks of

effective teaching⁵²—is the focus of much creative work in our field. When we attend conferences, discuss pedagogical best practices with our peers, and read scholarship in the legal writing field, we can sense that many inventive redescriptions lie within promising chrysalises, soon to emerge.

C. The Ethics of Mind Change and the “GoodWork” of Teaching Legal Writing

The epilogue to *Changing Minds* briefly but insightfully addresses the ethics of mind change.⁵³ Mind changing can serve destructive ends, Gardner concedes. He challenges leaders and teachers to ask how we can “change minds so that excellence and ethics are more closely allied” than they seem today.⁵⁴ No pat formula can determine the morality of particular attempts to change minds, Gardner argues. We nonetheless can gauge the morality of our efforts using the following “practical monitors,” three questions focused on the “three Ms” of *mission, models, and mirror*:⁵⁵

1. Do I believe in, and am I striving to fulfill, the *mission* of my profession? This question should prompt us to ask, recurrently, why we entered our profession and how it contributes to society. Gardner, for example, “monitor[s] critically” whether he is fulfilling his threefold teaching mission: “(1) to introduce students to the best thinking of the past; (2) to prepare their minds for an uncertain future ... ; and (3) to model aspects of civility in the treatment of individuals and the materials of work.”⁵⁶

2. Is my conduct favorable in relation to *models*? Positive models are “individuals whom one respects and to whom one looks for guidance in one’s work,” whereas “antimentors or tormentors”—negative role models—“serve as cautionary tales.”⁵⁷

3. Do I pass “the *mirror test*”? Passing the mirror test means looking in the mirror and favorably answering hard questions concerning feelings about one’s work.⁵⁸ In particular, we must ask whether we feel engaged in “GoodWork,” meaning “work that is at once technically excellent and that seeks outcomes that are ethical, moral, and responsible.”⁵⁹

If we engage consistently in this “threefold process” of questioning, Gardner writes, we increase our chances of being a “GoodWorker.”

Are legal research and writing professors engaged in “GoodWork”? If we teach respectfully and diligently, we must be. We can answer Gardner’s three ethical monitoring questions encouragingly: Our *mission* is admirable; we have many inspiring *models*; and collectively our *mirrors* reflect faces that have reasons to answer yes when asked, “Am I proud of the way in which [I and] my fellow professionals are carrying out our work?”⁶⁰

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⁵² *Changing Minds* at 125.

⁵³ The ethics are more fully described in Howard Gardner, Mihaly Csikszentmihalyi & William Damon, *Good Work: When Excellence and Ethics Meet* (2001) (hereinafter *Good Work*).

⁵⁴ *Changing Minds* at 205.

⁵⁵ *Id.* at 208.

⁵⁶ *Id.* at 206–07.

⁵⁷ *Id.* at 207.

⁵⁸ *Id.* at 207.

⁵⁹ *Id.* at 205–07. See also *Good Work* at xi (spelling the phrase as two words but defining the same concept as “work of expert quality that benefits the broader society”).

⁶⁰ *Id.* at 207 (listing this profession-centered question as a broader, complementary part of the “mirror test”).