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THE OTHER SIDE OF THE STORY: USING GRAPHIC ORGANIZERS TO COUNTER THE COUNTER-ANALYSIS QUANDARY

Lisa T. McElroy† and Christine N. Coughlin††

I. INTRODUCTION¹

“There are two sides to every story.”²

Very little has been written about the construction and cognition of legal counter-analysis.³ This lack of literature should come as a surprise in light of the fact that effective lawyers require themselves, and are required by ethical rules, to consider both sides of the legal

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1. The ideas in this paper originated in a presentation by Professor Lisa T. McElroy at the 2009 Rocky Mountain Regional Legal Writing Conference in Tempe, Arizona (Mar. 14, 2009).
2. The original slogan for WICKED: THE MUSICAL, now a popular mantra for fans of the musical.
3. See, e.g., Maureen B. Collins, *Point/Counterpoint: Crafting a Counter-Argument*, 89 ILL. B.J. 267 (2001) (discussing persuasive writing but failing to address predictive analysis); Kathryn M. Stanchi, *Playing with Fire: The Science of Confronting Adverse Material in Legal Advocacy*, 60 RUTGERS L. REV. 381 (2008); cf. Sarah E. Ricks, *Teaching 1Ls to Think like Lawyers by Assigning Memo Problems with No Clear Conclusions*, 14 PERSP.: TEACHING LEGAL RES. AND WRITING 10 (2005) (describing students' lack of familiarity with predictive counter-analysis). See generally Susan E. Provenzano & Lesley S. Kagan, *Teaching in Reverse: A Positive Approach to Analytical Errors in 1L Writing*, 39 LOY. U. CHI. L.J. 123 (2007) (describing an empirical study concerning common student problems with analysis and counter-analysis and recommending use of error analysis to assist students with self-correction).

and factual story they seek to advance.⁴ Law school professors routinely expect law students to look at issues from both sides, whether in responding to a law school exam hypothetical or in writing predictive memorandum assignments.⁵ In teaching students to engage in thoughtful legal analysis, professors should instruct them to address counter-analysis as a critical component of the analysis. While most students begin to grasp the fundamentals of primary legal analysis during the first weeks of law school, those same students are slower to learn to apply those same basic analytical skills to formulate counter-analysis.⁶ As a result of their failure to understand how the basic analytical process applies to and requires the inclusion of counter-analysis, many students advance unfounded—or even ridiculous—counter-analyses instead of considering concretely what opposite conclusion the court could reach.⁷

Developing a method for effectively teaching counter-analysis is important because good lawyering requires complex analysis that

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4. See, e.g., MODEL RULES OF PROF'L CONDUCT R. 3.3 (2009); see also *infra* note 88 and accompanying text; Stanchi, *supra* note 3, at 381–82; James Stratman, *Investigating Persuasive Processes in Legal Discourse in Real Time: Cognitive Biases and Rhetorical Strategy in Appeal Court Briefs*, 17 DISCOURSE PROCESSES 1, 7–13 (1994); Kathryn A. Sampson, *Adverse Authority: Rationales and Methods for Using It to Strengthen Legal Argument*, 1999 ARK. L. NOTES 93 (1999).
5. See, e.g., Kenney F. Hegland, *On Essay Exams*, 56 J. LEGAL EDUC. 140, 148 (2006) (“I tell [my students] to relish ambiguities, to force themselves to find latent inconsistencies in the ‘four elements,’ and, when they finally think they understand an area, to attack that understanding with counter-examples and tough hypos.”); Philip C. Kissam, *Law School Examinations*, 42 VAND. L. REV. 433, 440–41 (1989). Kissam states:

[One] examination function requires the application of legal authorities to complex fact situations [T]his process is often referred to as ‘analysis,’ but the more basic notion of ‘rule application’ is probably a more accurate description of this intellectual function. The application of legal authority to a given situation can involve: (1) a straightforward integration or synthesis of a rule’s complex elements to various facts; (2) the perception of ambiguity in the application of a general standard to specific facts, which allows for the construction of competing arguments about application of the rule; (3) the perception of ambiguous or contradictory facts, which also allows for constructing competing arguments

Id.; see also Ruth Colker, *Extra Time as an Accommodation*, 69 U. PITT. L. REV. 413, 465 (2008); Greg Sergienko, *New Modes of Assessment*, 38 SAN DIEGO L. REV. 463, 468 (2001).

6. See Provenzano & Kagan, *supra* note 3, at 123.
7. *Id.* app. A at 177–82; see text accompanying *infra* note 30.

recognizes the subtleties of the situation being analyzed.⁸ Students need to learn that effective counter-analysis, just like primary analysis, is based on the application of legal principles to a client's facts and not on speculation or whimsy.⁹ In other words, if they predict that their client will prevail, they need to remember that the court could logically reach the opposite conclusion. Students should understand that, in the counter-analysis section of the organizational structure, they will be explaining what viable legal arguments would lead a court to reach a conclusion other than the one predicted in the primary analysis. They will then reiterate why their primary analysis is more firmly grounded in the facts and law.¹⁰

This Article begins by defining counter-analysis generally and using social science and educational psychology theory to explain why the process is difficult.¹¹ The Article next examines relevant learning theory about cognition and illustrates how learning tools, such as graphic organizers, can assist encoding analytical skills in the student's long-term memory.¹² The Article then offers several examples of how law professors can apply cognitive learning theory to their classroom teaching of counter-analysis using graphic organizers.¹³ The Article concludes by arguing that the teaching of counter-analysis, while difficult, is critical to fully develop a student's analytic ability.¹⁴ It should, therefore, be taught using instructional techniques that are organized and systematic and involve active learning opportunities.¹⁵

II. IDENTIFYING AND UNDERSTANDING THE DIFFICULTIES IN CONSTRUCTING EFFECTIVE COUNTER-ANALYSIS

Counter-analysis considers the alternative arguments and outcomes inherent to the legal question being considered. It "presents reasons why one's position might not be true or advisable."¹⁶ Specifically, it

8. See generally Kristen K. Robbins, *Paradigm Lost: Recapturing Classical Rhetoric to Validate Legal Reasoning*, 27 VT. L. REV. 483, 516–23 (2003).

9. See CHRISTINE COUGHLIN ET AL., A LAWYER WRITES 151–52 (2008) [hereinafter A LAWYER WRITES].

10. *Id.* at 153–60.

11. See *infra* Part II.

12. See *infra* Part III.

13. See *infra* Part IV.

14. See *infra* Part V.

15. See *infra* Part V.

16. E. Michael Nussbaum & CarolAnne M. Kardash, *The Effects of Goal Instructions and Text on the Generation of Counterarguments During Writing*, 97 J. EDUC. PSYCHOL.

brings to light facts, law, and interpretations of each that might result in an outcome different from the one predicted, and discusses why, despite the weaknesses, the predicted outcome in the primary analysis is more likely.¹⁷

In order to reach the logically strongest overall conclusion, “it is important for students also to learn to critically evaluate arguments and counterarguments.”¹⁸ Counter-analysis, moreover, serves an additional rhetorical function.¹⁹ Specifically, it “enhances the writer’s credibility as an intelligent source of information . . . [and] it enhances the good will aspect of credibility.”²⁰

While this process may sound relatively straight-forward, it is anything but easy. Social scientists have studied the theory of conceptual change,²¹ the corollary to counter-analysis in a non-legal context, and have recognized that this task involves the following steps: (1) thinking deeply about the alternative conception,²² (2) juxtaposing argument against the alternative, (3) explaining

157, 157 (2006); see also, e.g., Selma Leitão, *Evaluating and Selecting Counterarguments*, 20 WRITTEN COMM. 269–306 (2003).

17. Moreover, constructing effective counter-arguments is not only important in law school but is an important skill in many “writing genres, including academic, business, expository, and persuasive writing.” Nussbaum & Kardash, *supra* note 16, at 157.
18. E. Michael Nussbaum, *Using Argument Vee Diagrams (AVDs) for Promoting Argument-Counterargument Integration in Reflective Writing*, 100 J. EDUC. PSYCHOL. 549, 550 (2008) (“[C]ounterargument integration is loosely based on neo-Piagetian views of reasoning development” and “[e]ffective argumentation also involves metacognitive reflection, a ‘stepping back’ that allows one to view and weigh the overall merits of different arguments and counterarguments.”). Moreover, a “meta-analysis . . . found that texts that considered and rebutted counterarguments were more persuasive than texts that did not.” Nussbaum & Kardash, *supra* note 16, at 157.
19. MICHAEL R. SMITH, *ADVANCED LEGAL WRITING: THEORIES AND STRATEGIES IN PERSUASIVE WRITING* 174 n.12 (2d ed. 2008).
20. *Id.* See also generally Shailini J. George, *The Three C’s: Counterarguments, Concessions and Credibility*, MASS. LAW. WKLY., Apr. 6, 2009.
21. See, e.g., Nussbaum & Kardash, *supra* note 16, at 157; Stella Vosniadou, *What Can Persuasion Research Tell Us About Conceptual Change that We Did Not Already Know?*, 35 INT’L J. EDUC. RES. 731, 733 (2001) (examining studies to show why the psychological and philosophical research lines on persuasion and perceptual change “have developed concurrently but separately”) (internal citations omitted).
22. E. Michael Nussbaum & Gale M. Sinatra, *Argument and Conceptual Change*, 28 CONT. EDUC. PSYCHOL. 384, 384 (2003) (citing J. A. Dole & Gale M. Sinatra, *Reconceptualizing Change in the Cognitive Construction of Knowledge*, 33 EDUC. PSYCHOLOGIST 109, 121 (1998)).

anomalous pieces of data, and (4) weighing issues and arguments.²³ The process that allows a student to engage in effective counter-analysis involves “deep processing, elaborative strategy use and significant meta-cognitive reflection.”²⁴ Because of the difficulties inherent to this type of thinking, social scientists have recognized that students are “often not willing to engage in such ‘heavy cognitive lifting’ . . . [because of] [l]ack of interest, motivation, or unwillingness to extend sufficient cognitive effort.”²⁵

Legal educators have identified similar trends in law students who are trying to understand the process and substance of counter-analysis.²⁶ While there are students who lack the interest or motivation, or are otherwise unwilling to learn, even dedicated law students may have difficulty learning to use counter-analysis effectively for a variety of additional reasons.

First, first-year students may feel a tension between their possible rhetorical roles.²⁷ Beginning law students—even, we may suppose, beginning lawyers—may still lack the skills, insight, or confidence to make a legal prediction without attempting to persuade the reader that their prediction is correct. Their investment in their conclusion or desire to help their client succeed may cause them to feel threatened by a strong counter-analysis, given the perceived potential that a reader may not be convinced by the primary analysis if convincing arguments exist to reach the opposite conclusion.²⁸

The mental process of coherence-based reasoning may help to explain why beginning law students and lawyers become invested in their conclusions to the point of having difficulty making effective counter-conclusions. According to this theory, because difficult decisions are intimidating in many ways, a legal decision-maker will unconsciously transform that decision into a “seemingly straightforward choice between a compelling alternative and a weak

23. *Id.*; see also Nussbaum, *supra* note 18, at 550 (asserting that educators must teach students to reason in a balanced way by recognizing and critiquing personal biases and considering opposing views).

24. Nussbaum & Sinatra, *supra* note 22, at 385 (quoting J.A. Dole & Gale M. Sinatra, *supra* note 22, at 121); see E. Michael Nussbaum & Gregory Schraw, *Promoting Argument-Counterargument Integration in Students' Writing*, 76 J. EXPERIMENTAL EDUC. 59, 60 (2007).

25. Nussbaum & Sinatra, *supra* note 22, at 385.

26. See generally Provenzano & Kagan, *supra* note 3, at 182–85 (listing percentages of students who made various legal analysis errors on a memorandum assignment).

27. See Robbins, *supra* note 8, at 516–23.

28. George, *supra* note 20, at 21 (“So, while it is always necessary to present good strong arguments in your clients’ favor, it can also be very helpful to consider those arguments *not* in your favor and turn them into further fuel for your analysis.”).

one.”²⁹ In other words, in order to make a supportable and defensible decision, a legal decision-maker will transform “[a]mbiguous, equivocal, and conflicting variables . . . into coherent models, that is, lopsided and exaggerated mental representations in which the variables that support the emerging decision are strongly accepted while those that support the losing decision are dismissed, rejected, or ignored.”³⁰

Similarly, cognitive dissonance theory, a popular psychological theory on decision-making for fifty years,³¹ explains that “[w]hen a person with a strong belief is challenged by contradictory evidence, he is less likely to discard the belief than to ‘show a new fervor about convincing and converting other people to his view.’”³² Thus, according to one scholar, “if the pedagogic goal is to increase dissonance and thereby to increase learning, it is important that students . . . feel the psychological discomfort created by the inconsistencies.”³³ In other words, for students fully to understand legal analysis, they must become comfortable with the process of disagreeing with their own conclusions, even when doing so creates dissonance. Because of their lack of experience, beginning law students do not understand that their discomfort with an analysis that includes a strong counter-analysis, or dissonance, is actually a signal that their analytical process is strong and capable.

Second, due to the transition into professional school, the lack of experience and confidence that beginning law students have in their emerging legal writing and analytical abilities can cause those abilities to revert back or deteriorate.³⁴ Particularly today, with the

29. Dan Simon, *A Third View of the Black Box: Cognitive Coherence in Legal Decision Making*, 71 U. CHI. L. REV. 511, 513 (2004). The theory of coherence-based reasoning may help to explain how judges and fact-finders “shun[] cognitively complex and difficult decision tasks by reconstructing them into easy ones, yielding strong, confident conclusions.” *Id.*

30. *Id.* at 545.

31. See Nancy Leong, *The Saucier Qualified Immunity Experiment: An Empirical Analysis*, 36 PEPP. L. REV. 667, 703 & n. 128 (2009).

32. Julie A. Seaman, *Cognitive Dissonance in the Classroom: Rationale and Rationalization in the Law of Evidence*, 50 ST. LOUIS U. L.J. 1097, 1112 (2005–2006).

33. *Id.* at 1113. In fact, “[a]n insistence that students focus on the inconsistencies in the rules, their rationales, and their application highlights the dissonance in the law and thereby creates a state of cognitive dissonance in the classroom. By doing this, teachers may be able to help students gain a deeper, more transformative understanding of the law.” *Id.* at 1114.

34. See Provenzano & Kagan, *supra* note 3, at 146–47 (discussing the fact that many students when transitioning from high school to college or college to graduate or professional school revert or see deterioration in their writing skills).

heavy emphasis on standardized testing,³⁵ the vast majority of students have been educated in environments where there is a right and wrong answer. Due to their intense awareness of their status as beginners, students may tend automatically to return to the mindset that there must be a “correct” response to the legal question presented.³⁶ Moreover, some studies report that there can be an actual deterioration in their prior skills during the transition period.³⁷ Quite simply, they lack courage and confidence, just as new doctors may not believe in themselves sufficiently to make a differential diagnosis on a patient.³⁸

Third, while many law students have experience with presenting oral counter-analysis through their education or prior experience with debate, the ability and skill to see both sides of the argument is not one that automatically transfers to writing.³⁹ As one scholar noted, “[t]he cues to consider and respond to opposing viewpoints are missing . . . in written discourse. As a result, students tend to generate either narrative discourse, which requires fewer conversational cues, or, . . . assertions with supporting reasons but without consideration of counterarguments and responses to counterarguments.”⁴⁰

Fourth, beginning law students may not yet understand the source of counter-analysis—namely, that they can find legal foundation for the opposite conclusion in the legal rules they have synthesized from precedent cases, in the facts of those same cases, and in the reasoning the courts used in those cases.⁴¹ While these concepts are intuitive for experienced lawyers, students may need explicit instruction in finding and outlining counter-analysis from these sources of authority. Because they are still struggling to find what certainly falls within the rule, they may not yet be able to see beyond the rule to what reasoning falls at its limits—or even beyond it—or the role of exceptions in relation to most legal rules.

Fifth, new law students typically do not yet understand their ethical and professional duties as lawyers.⁴² It may take years for young

35. See No Child Left Behind Act of 2001, 20 U.S.C. § 6301 (2006).

36. See Provenzano & Kagan, *supra* note 3, at 146–47.

37. *Id.* at 146 (citing Joseph M. Williams, *On the Maturing of Legal Writers: Two Models of Growth and Development*, 1 J. LEGAL WRITING INST. 1, 2, 10, 15 (1991)).

38. See Joseph M. Williams, *On the Maturing of Legal Writers: Two Models of Growth and Development*, 1 J. LEGAL WRITING INST. 1, 14–15 (1991).

39. Nussbaum & Kardash, *supra* note 16, at 157.

40. *Id.*

41. A LAWYER WRITES, *supra* note 9, at 153–60.

42. See *supra* note 4 and accompanying text.

lawyers to understand completely that their job requires them to alert supervising attorneys and clients to facts and law that may not work in their favor and to ascertain whether damage control, settlement, or declining representation may be more appropriate under the circumstances.⁴³

While there are many reasons for students' difficulty contemplating and considering counter-analyses, the errors made by law students tend to be similar in nature, taking one or more of the following forms: (1) suggesting that the court will disregard settled law out of concern about this particular set of facts; (2) suggesting that the court will make up a new rule in an area where the rule is well-settled; (3) suggesting that some completely unanticipated event will occur, causing the court to reach an unprecedented conclusion; or (4) ignoring or devaluing other possible legal assessments of the client's facts.⁴⁴

The following examples may serve to illustrate these types of analytical errors:

Example 1: Disregarding settled law out of concern about this particular set of facts.

"Even though the rule states that, in order to qualify as a service animal, an animal must do more than make its owner feel better, the court will probably sympathize with our client and order the housing complex to allow him to keep his cat [even though the facts state that the cat does nothing more than lick its owner's face regularly]."⁴⁵

Example 2: Making up a new rule in an area where the law is well-settled.

"The court may consider the tender age of the plaintiff in this case as a factor in deciding whether the conduct was

43. See *supra* note 4 and accompanying text.

44. See, e.g., Provenzano & Kagan, *supra* note 3, at 182–85 (reporting that 44.72% of students in study bounced back and forth between each party's argument rather than stating the primary argument, then the counter-argument, then the rebuttal; 15.85% of students created unrealistic or weak counter-argument for the sake of having one; 15.47% of students gave incomplete explanations of the counter-argument; 14.34% of students presented an unconvincing rebuttal; 3.12% of students had an absence of counter-argument where necessary and legitimate; and 1.89% of students made a conclusion in the counter-argument contrary to that stated earlier in the brief answer or thesis).

45. See, e.g., *Prindable v. Ass'n of Apartment Owners of 2987 Kalakaua*, 304 F. Supp. 2d 1245, 1257 n.25 (D. Haw. 2003) (holding that an animal is not a service animal if it merely provides "some comfort" and makes a person feel better (citing *In re Kenna Homes Coop. Corp.*, 557 S.E.2d 787, 797 (W. Va. 2001))).

extreme and outrageous [even though we don't have a single case that says that age alone is a factor]."⁴⁶

Example 3: Relying on the possible occurrence of some completely unanticipated and unprecedented event.

"Because the Great Dane may turn out to have rabies [even though the facts state that it is up to date on its vaccinations and has had a recent veterinary examination], the court may find that the apartment complex does not have to allow the disabled tenant to keep it [even though the Great Dane qualifies as a service animal under state and federal law]."⁴⁷

Example 4: Ignoring or devaluing other possible legal assessments of the client's facts.

"There is simply no way that the court could consider the coach's statement that the boy was playing like s**t to be merely rude or insulting [as opposed to atrocious or shocking the conscience] because swearing is outright unacceptable."⁴⁸

In order to help students avoid making these classic mistakes, it is helpful for professors to understand learning theory relevant to students' emerging analytical skills.

III. COGNITIVE LEARNING THEORY CAN OFFER INSIGHT INTO HELPING STUDENTS ACHIEVE AUTOMATICITY WITH THEIR COUNTER-ANALYSIS

To teach students a new construct for examining information—legal analysis—we need to understand why and how our students

46. See RESTATEMENT (SECOND) OF TORTS § 46 (1965).

47. See, e.g., 28 C.F.R. § 36.104 (2008) (defining "service animal"); 42 U.S.C. § 3601, 3604(3)(A) (2000) (Fair Housing Act); 24 C.F.R. § 100.204 (a) ("It shall be unlawful for any person to refuse to make reasonable accommodations in rules, policies, practices, or services, when such accommodations may be necessary to afford a handicapped person equal opportunity to use and enjoy a dwelling unit, including public and common use areas."); cf. 42 U.S.C. § 3601, 3604(9) (2000) ("Nothing in this subsection requires that a dwelling be made available to an individual whose tenancy would constitute a direct threat to the health or safety of other individuals . . .").

48. Swearing in and of itself is not generally considered to be extreme and outrageous. See *Stauber v. New York City Transit Auth.*, 781 N.Y.S.2d 26, 27 (2004); *Langley v. DaimlerChrysler Corp.*, 407 F. Supp. 2d 897, 907 (N.D. Ohio 2005).

learn.⁴⁹ While educational psychologists have developed multiple theories on how humans learn,⁵⁰ the cognitive school of learning closely correlates with the methodical process used in law school.⁵¹

Cognition is described as “the way in which we think about, approach, obtain, and process information.”⁵² Cognitive learning theory espouses that the memory system, with its short-term and long-term sorting and encoding components, guides the learning process.⁵³ Learning is best achieved when the information is presented systematically and stored in the student’s brain in an “organized, meaningful and useable manner.”⁵⁴

Learning is enhanced when the student is actively engaged in the process.⁵⁵ According to cognitive learning theory, “[b]ecause it is the learner who must ultimately store and retrieve the learning, the crucial factor in learning is the ‘active’ involvement of the learner.”⁵⁶ The more active the student in the sequenced learning process, the more likely the skill becomes encoded and moves from short-term to long-term memory.⁵⁷ Once information is encoded in a student’s long-term memory, the goal is “automaticity,” which means that the

49. See Kirsten Dauphinais, *Valuing and Nurturing Multiple Intelligences in Legal Education: A Paradigm Shift*, 11 WASH & LEE R. & ETH. ANC. L.J. 1 (2005); GERALD F. HESS & STEVEN FRIEDLAND, *TECHNIQUES FOR TEACHING LAW* 8–10 (1999).

50. MICHAEL HUNTER SCHWARTZ, *EXPERT LEARNING FOR LAW STUDENTS* 21–24 (2005) [hereinafter SCHWARTZ, *EXPERT LEARNING*].

51. See Provenzano & Kagan, *supra* note 3, at 128 (“LRW professors . . . draw regularly on pedagogical insights from other fields, including composition theory and cognitive psychology.”); Laurel Curry Oates, *I Know That I Taught Them How to Do That*, 7 J. LEGAL WRITING INST. 1, 1 (2001) (encouraging use of cognitive learning theory in legal writing pedagogy); Paula Lustbader, *Construction Sites, Building Types and Bridging Gaps: A Cognitive Theory of the Learning Progression of Law Students*, 33 WILLAMETTE L. REV. 315, 325–26 (1997).

52. Lustbader, *supra* note 51, at 324.

53. SCHWARTZ, *EXPERT LEARNING*, *supra* note 50, at 21–24.

54. *Id.* at 21.

55. Robin A. Boyle, *Employing Active-Learning Techniques and Metacognition in Law School: Shifting Energy from Professor to Student*, 81 U. DET. MERCY L. REV. 1, 3–4 (2003).

56. Michael Hunter Schwartz, *Teaching Law by Design: How Learning Theory and Instructional Design Can Inform and Reform Law Teaching*, 38 SAN DIEGO L. REV. 347, 374 (2001) [hereinafter Schwartz, *Teaching Law by Design*].

57. See SCHWARTZ, *EXPERT LEARNING*, *supra* note 50, at 21–24. “[L]aw professors should teach law students how to be active learners Students should be taught both the importance of encoding their learning and the many techniques available to facilitate their encoding efforts, such as . . . developing concept maps that visually express the relationships among the ideas under study [and] creating flow charts that depict logical flows in the analytical process” See Schwartz, *Teaching Law by Design*, *supra* note 56, at 376–77.

student has “learn[ed] the material so well that [he] can recall it with minimal attention.”⁵⁸

With respect to learning within the law school environment, “cognitivists emphasize ‘structuring, organizing, and sequencing information to facilitate optimal processing.’”⁵⁹ Cognitivists believe that one way to emphasize structure, organization, and sequence is to deconstruct material by use of graphic organizers to visually display “the hierarchies in the materials being studied.”⁶⁰

Specifically, graphic organizers are “a visual display that presents the key ideas in a structure that reflect the relationships among the concepts.”⁶¹ When written material or difficult concepts are expressed graphically, the students can develop alternative structures for understanding the course concepts.⁶²

Graphic organizers also enhance students’ ability to learn to refute arguments.⁶³ For example, in one study, educational psychologists asked eighty-four undergraduate students to write a reflective essay on the topic, “Does watching TV cause children to become more violent?”⁶⁴ The students were provided, *inter alia*, with graphic organizers.⁶⁵ The educational psychologists found that graphic organizers made the “arguments-counterarguments salient, so it [was] easy to pick arguments to support and refute.”⁶⁶

58. SCHWARTZ, EXPERT LEARNING, *supra* note 50, at 22. In order to achieve automaticity, or the ability to automatically perform a skill without individually thinking about each component, cognitive theorists believe that the students must develop schemata which Professor Michael Hunter Schwartz describes as being like entire computer programs in that the organized material includes structures that reflect how to perform skills. *Id.* at 22. Thus, most adults who can play a musical instrument, such as the piano, have developed a schema for performing all the mental steps involved. These steps include identifying each mark on the sheet of music, knowing what each mark means and understanding the relationship among: the marks, the black and white keys, their hands, the necessary fingering to reach all the keys, the pedals below the keys and their feet. *Id.*; see also Lustbader, *supra* note 51, at 325–26.

59. See SCHWARTZ, EXPERT LEARNING, *supra* note 50, at 375 (quoting Peggy A. Ertmer & Timothy J. Newby, *Behaviorism, Cognitivism, Constructivism: Comparing Critical Features from an Instructional Design Perspective*, 6 PERFORMANCE IMPROVEMENT Q. 50, 60 (1993)).

60. *Id.*

61. Peter Dewitz, *Reading Law: Three Suggestions for Legal Education*, 27 U. TOL. L. REV. 657, 667 (1996).

62. *See id.*

63. See Nussbaum, *supra* note 18, at 551 (citing Nussbaum & Schraw, *supra* note 24, at 69–71).

64. *Id.*

65. *Id.*

66. *Id.* Note that the authors also found that specific criteria instruction was also helpful, perhaps even more so than the form of graphic organizer they chose to employ. The

Moreover, in addition to being an established cognitive tool to promote learning, graphic organizers also aid students with differing learning styles in their quest to master legal analysis.⁶⁷ There has been increasing attention paid to the role of learning styles in the law school classroom.⁶⁸ Because many law students are visual,⁶⁹ tactual,⁷⁰ or kinesthetic learners, teaching methods designed to meet their learning needs may help them grasp the early fundamentals of learning legal analysis.⁷¹ Professors who incorporate several different

authors hypothesized, however, that the two interventions may have activated somewhat different argumentation schema and that changing the form of the graph could increase its utility. *See id.*; *see also* Nussbaum & Schraw, *supra* note 24, at 59.

67. Specifically, “[w]hile classroom lectures and discussion may aid aural and oral learners, no integral aspect of legal education aids the visual learner.” M. H. Sam Jacobson, *How Law Students Absorb Information: Determining Modality in Learning Style*, 8 J. LEGAL WRITING INST. 175, 181 (2002).
68. Kristin B. Gerdy et al., *Expanding Our Classroom Walls: Enhancing Teaching and Learning Through Technology*, 11 J. LEGAL WRITING INST. 263, 268 (2005) (“With the introduction and acceptance of learning style theories . . . overall education is improving—beginning with the individual student’s recognition of how he or she learns and progressing to the teacher’s ability, if not responsibility, to adjust teaching style to best facilitate learning.”).
69. Visual learners prefer to see concepts depicted graphically through their inter-relationships. These students gravitate toward all forms of graphic organizers, including flow charts, concept maps, hierarchy charts and comparison charts. These students need to translate written and spoken information into graphic form and then translate their graphics into the written and spoken word. Visual learners learn best through pictures or diagrams, not through written text. *See* Jacobson, *supra* note 67, at 178 n.11 (stating that 30% of author’s students at Willamette University College of Law are visual learners, a substantial increase over thirteen years). *Cf.* Robin A. Boyle & Rita Dunn, *Teaching Law Students Through Individual Learning Styles*, 62 ALB. L. REV. 213, 227–29 (1998) (stating that only 8% of first-year students tested at St. John’s in 1998 had high visual learning strengths). Jacobson says that “[a]fter verbal learning, the most common mode for absorbing information is visual” and attributes some of the increase in visual learners to the early use of computers. Jacobson, *supra* note 67, at 180.
70. Tactual (sometimes called “tactile”) learners prefer the written word. Tactual learners learn best if they physically write or draw, touch, or manipulate. *See, e.g.*, Jacobson, *supra* note 67, at 182 (stating that tactile and kinesthetic learners are the “least common learners in law school” but offering no empirical support for that proposition). They like to learn from texts and other written materials and to express themselves in writing as well. In one study at St. John’s Law School, 21% of the first-year law students tested were highly tactual learners. *See* Boyle & Dunn, *supra* note 69, at 228.
71. Of course, many students are also auditory learners, but the law school curriculum certainly has plenty of opportunities for students to learn through listening to a professor speak. *See, e.g.*, Boyle & Dunn, *supra* note 69, at 227 (showing that 26% of first-year law students tested had high auditory learning strengths). *Cf. generally* ROY STUCKEY AND OTHERS, *BEST PRACTICES FOR LEGAL EDUCATION* (2007); WILLIAM M.

teaching methods into any given class will therefore reach students with different types of strengths on a deeper level.⁷² More specifically, graphic organizers may help students learn analysis because they “let[] the writer visualize relationships, steps, or chronology by showing the spatial relationship between the ideas.”⁷³ Further, “[g]raphic organizers permit visual modality preferent learners an opportunity to significantly improve construction of interrelational conceptual models.”⁷⁴ Therefore students may have a much easier time understanding legal analysis when they graph out and organize that analysis.

IV. HELPING STUDENTS LEARN THE FUNDAMENTALS OF COUNTER-ANALYSIS: A GRAPHING STRATEGY

*“[The u]se of visual aids in the classroom is as old as the art of teaching itself—even Socrates drew diagrams in the sand.”*⁷⁵

To help students achieve proficiency in formulating counter-analysis, professors should consider using learning methods recommended by experts in cognitive learning theory.⁷⁶ Because

SULLIVAN, ANNE COLBY, JUDITH WELCH WEGNER, LLOYD BOND & LEE S. SHULMAN, *EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW* (2007) (two landmark reports on legal education stating that law schools rely overly on lecture and Socratic formats).

72. Boyle & Dunn, *supra* note 69, at 216.

73. M. H. Sam Jacobson, *Learning Styles and Lawyering: Using Learning Theory to Organize Thinking and Writing*, 2 J. ASS’N LEGAL WRITING DIRECTORS 27, 52 (2004).

74. William Wesley Patton, *Opening Students’ Eyes: Visual Learning Theory in the Socratic Classroom*, 15 LAW & PSYCHOL. REV. 1, 4 (1991) (citing Alice M. Derr & Chris L. Peters, *The Geometric Organizer: A Study Technique*, 21 ACADEMIC THERAPY 357, 359 (1986)) (explaining that “[i]t is the student’s active construction of the content of the organizer which improves learning and memory”). Professor Patton has also written about how “triangle organizers [in which relationships between concepts are graphed in triangle format] help[] the visually dominant student to more easily focus on the shared characteristics among different common law torts in determining the likely result according to the constitutional constraints . . . discussed [in class].” *Id.* at 5–6; *see also id.* at 12 (discussing the use of a ship-shaped diagram in plotting negligence elements and stating that “[i]t is the process of constructing and annotating the organizer which enables students to retain the substance of the icon”).

75. Fred Galves, *Will Video Kill the Radio Star? Visual Learning and the Use of Display Technology in the Law School Classroom*, 2004 U. ILL. J.L. TECH. & POL’Y, 195, 198 (2004) (quoting Vincent Robert Johnson, *Audiovisual Enhancement of Classroom Teaching: A Primer for Law Professors*, 37 J. LEGAL EDUC. 97, 99 n.8 (1987) (citation omitted)).

76. *See supra* notes 16–20 and accompanying text and Part III (discussing how cognitive theories can help students to develop more intuitive counter-analysis).

graphic organizers may help students with different learning styles map out and organize their analysis, representing their legal analysis in graphic form may help them see the big picture of how the components of the analysis fit together. Moreover, because many students learn through interacting physically with learning material, actually drawing the graphs may help them internalize and express the analysis they are graphing.⁷⁷ It may also help them decrease the dissonance they feel about countering their own predictions, as they will be able to see from their graphic organizers that they could logically reach more than one legal conclusion.⁷⁸

Therefore, professors may find that students will benefit from using graphic organizers to situate their counter-analysis in analytic techniques and concepts they already know: rule synthesis, rule parameters, analogy and distinction, and weight of authority.

A. *The First Step: Graphing Primary Analysis*

In the first weeks of a basic legal analysis class, most professors teach students to synthesize legal rules from a variety of authorities.⁷⁹ They then teach students to apply those synthesized rules to a hypothetical client's facts.⁸⁰ One important concept for new law students to grasp is that every rule is a continuum; it is just as important to know what does *not* fall within a legal rule as what *does*.⁸¹ We typically give this continuum concept a name: rule parameters.⁸²

To help students grasp the rule parameter concept—one which they will need to use in formulating counter-analysis—professors should instruct students to use a graphic organizer or visual aid. Rather than creating a visual aid and then showing it to the students, professors should allow students to engage physically with the law, to map out the rule synthesis and rule parameters in the form of a graphic

77. See *supra* notes 52–74 and accompanying text.

78. See *supra* notes 31–32 and accompanying text.

79. See Philip C. Kissam, *Law School Examinations*, 42 VAND. L. REV. 433, 439 (1989).

80. See *id.*

81. See, e.g., A LAWYER WRITES, *supra* note 9, at 110–13; cf. MICHAEL D. MURRAY & CHRISTY H. DE SANCTIS, LEGAL RESEARCH & WRITING 84–89 (2005) (stating that a writer should gather controlling authority and reconcile any differences into a coherent legal rule); LINDA H. EDWARDS, LEGAL WRITING AND ANALYSIS, 163–64 (2003) (stating that common law case synthesis requires combining the holding of several cases in order to discern the factors and exceptions a court will examine when deciding an issue).

82. See A LAWYER WRITES, *supra* note 9, at 110–11.

continuum.⁸³ For example, the professor might tell students to draw a line to represent the continuum of a legal rule.

Is

Is Not

Once they have drawn the line, students should think again about the components of the rule and synthesize it to include explicit rule parameters. Writing out this synthesized rule in one or two sentences will help them boil the rule down to its essence.

Example 1: “Extreme and outrageous conduct is that which is regarded as atrocious and is utterly intolerable in a civilized community. It is not insults or rude comments.”⁸⁴

Example 2: “A service animal is a common domestic animal that has some degree of training and that ameliorates the effect of the disability. It is not an animal that merely makes its owner feel better.”⁸⁵

Once they have been able to reduce the rule to a few sentences, they can use the line they have drawn to help them view the rule graphically. By physically mapping the rule out along a line segment, they can literally “see the big picture” of the rule.

83. See *supra* notes 63–74 and accompanying text (explaining that perceiving a graph or picture may not cement an idea as concretely as actually creating that visual).

84. See, e.g., RESTATEMENT (SECOND) TORTS § 46 (1965) (“One who by extreme and outrageous conduct intentionally or recklessly causes severe emotional distress to another is subject to liability for such emotional distress”); see also RESTATEMENT (SECOND) TORTS § 46 cmt. d (1965) (“The liability clearly does not extend to mere insults, indignities, threats, annoyances, petty oppressions, or other trivialities. The rough edges of our society are still in need of a good deal of filing down, and in the meantime plaintiffs must necessarily be expected and required to be hardened to a certain amount of rough language, and to occasional acts that are definitely inconsiderate and unkind. There is no occasion for the law to intervene in every case where some one’s feelings are hurt.”).

85. See, e.g., 28 C.F.R. § 36.104 (2009) (defining “service animal” to include individual training to “perform tasks for the benefit of an individual with a disability”); *Bronk v. Ineichen*, 54 F.3d 425, 428–29 (7th Cir. 1995) (discussing the determination of whether an accommodation results in “ameliorating the effects of the disability” under federal law); *Prindable v. Ass’n of Apartment Owners of 2987 Kalakaua*, 304 F. Supp. 2d at 1257 n.25 (D. Haw. 2003) (stating that an animal is not a service animal if it merely provides “some comfort” and makes a person feel better (citing *In re Kenna Homes Coop. Corp.*, 557 S.E.2d 787, 797 (W. Va. 2001))).

Example 1:

Is	Is Not
Atrocious Shocks the conscience	Insults Rudeness

Example 2:

Is	Is Not
Ameliorates effects of disability Has some training	Makes owner feel better

By *seeing* and *feeling* how the law fits into a legal continuum, students may better understand the fact that legal rules are rarely black and white. Next, they must understand that, in analyzing a client's case, they must decide what shade of gray it is: in other words, where on the continuum a client's facts fit in relation to the rule. The professor should ask students to mark an "X" on the continuum to show where their client's facts fall in relation to the rule parameters. Do the facts fit better into what satisfies the rule, or what does not satisfy it? Students should also remember that it will be unusual for their client's facts to fall perfectly at either end of the continuum; more likely, the "X" will fall somewhere in the middle of the line, but closer to one end than the other.

Example 1:

Is	Is Not
X	
Atrocious Shocks the conscience	Insults Rudeness

Example 2:

Is	Is Not
<hr style="border: 0.5px solid black;"/> X	
Ameliorates effects of disability Has some training	Makes owner feel better

Now that the students have graphed out their client's legal position, they can use the graph as a visual guide to begin to draft their primary analysis by basing it on the law near which the "X" is situated. It will be helpful for them to note that where they place the "X" on the continuum will inform the strength and quality of their prediction. If the "X" is extremely close to one end of the continuum, the prediction may contain the words "probably (will/will not)" or "very likely (will/will not)." If the "X" is closer to the middle of the continuum, the prediction may contain the words "may" or "could."

B. The Second Step: Using Primary Analysis Graphs to Create a Counter-Analysis Formula

Students need to understand that formulating counter-analysis is not like throwing spaghetti at a wall and hoping it will stick.⁸⁶ Counter-analysis, like primary analysis, is grounded in the law.⁸⁷ Therefore, students can follow the same analytical steps to formulate counter-analysis that they used to make their primary predictions. Using the primary analysis graph, students could mark an "X" somewhere near the other end of the continuum to show how the court could reach the opposite conclusion in relying on the other rule parameter.

Example 1:

Is	Is Not
<hr style="border: 0.5px solid black;"/> X	
Atrocious Shocks the conscience	Insults Rudeness

86. Common expression.

87. See A LAWYER WRITES, *supra* note 9, at 154–57.

Example 2:

Is	Is Not
X	
Ameliorates effects of disability Has some training	Makes owner feel better

It is important for students to assess the facts and draw their own conclusions. It is even more important, however, that they not discount out of hand another feasible, supportable, and non-frivolous conclusion.⁸⁸ Using the graph to help them formulate the analysis will help them avoid the pitfalls of inventing counter-analysis out of thin air.⁸⁹ By laying out in picture form the alternative parameter, it will also encourage them to see that there is almost always another conclusion that a reasonable court could reach.⁹⁰

88. See, e.g., FED. R. CIV. P. 11(b), stating:

By presenting to the court a pleading, written motion, or other paper—whether by signing, filing, submitting, or later advocating it—an attorney or unrepresented party certifies that to the best of the person's knowledge, information, and belief, formed after an inquiry reasonable under the circumstances: (1) it is not being presented for any improper purpose, such as to harass, cause unnecessary delay, or needlessly increase the cost of litigation; (2) the claims, defenses, and other legal contentions are warranted by existing law or by a nonfrivolous argument for extending, modifying, or reversing existing law or for establishing new law; (3) the factual contentions have evidentiary support or, if specifically so identified, will likely have evidentiary support after a reasonable opportunity for further investigation or discovery; and (4) the denials of factual contentions are warranted on the evidence or, if specifically so identified, are reasonably based on belief or a lack of information.

Id.; see also MODEL RULES OF PROF'L CONDUCT R. 3.1 (2007) ("A lawyer shall not bring or defend a proceeding, or assert or controvert an issue therein, unless there is a basis in law and fact for doing so that is not frivolous, which includes a good faith argument for an extension, modification or reversal of existing law.").

89. See *supra* notes 39–40, 44 and accompanying text.

90. If a student's primary prediction is that their client will prevail, moreover, the graph will help them predict—and work to defend against—the arguments that opposing counsel is likely to advance. See *supra* notes 34–38 and accompanying text. Again, the process of laying out two opposite conclusions is likely to decrease cognitive dissonance, as well. See *supra* notes 29–30 and accompanying text.

Therefore, students might begin to draft their counter-analysis by basing it on the law near which their second “X” is situated. And—just as was the case when graphing out the primary analysis—students should consider that where they place the counter-analysis “X” will inform the strength and quality of their counter-prediction.

C. The Third Step: Moving Beyond Simple Rule Parameters to Add in Analogy and Distinction

Once students have mastered the basics of using rule parameters to formulate counter-analysis, they are ready for the next step: adding in analogy and distinction as counter-analytic tools. In separating the use of rule parameters and analogy and distinction into separate steps, it is important to note explicitly that effective legal analysis would combine these two concepts. For beginning law students, however, it may be helpful to teach the concepts separately so that they can grasp each one fully, and then demonstrate how they work together.

Example 1:

Our facts: A baseball coach told a player that he was “playing like s**t.”⁹¹

Facts from Case A: An employer called an employee by a racial slur on many separate occasions. The court held that the conduct could be extreme and outrageous because a reasonable jury could find that racist comments are intolerable in a civilized society.⁹²

Facts from Case B: An employer told an employee that she was as lazy as an elephant at the zoo. The court held that the conduct, while rude and insulting, did not rise to the

91. This hypothetical derives from a memorandum problem designed by Professor Lisa McElroy and Professor Alison Julien of Marquette University Law School in the spring of 2006. The problem was included in the 2008 LWI Idea Bank and has since been used in its original or modified form by several other law schools.

92. *See, e.g.,* *Wilson v. Lowe’s Home Ctr.*, 75 S.W.3d 229, 238 (Ky. Ct. App. 2001); *Wagner v. Merit Distrib.*, 445 F. Supp. 2d 899, 917 (W.D. Tenn. 2006). Note that courts also take into account the authoritative relationship between the parties. For simplicity’s sake, however, in this example, we will only consider the nature of the conduct and not the relationship between the parties.

level of extreme and outrageous because it did not shock the conscience.⁹³

Example 2:

Our facts: A man with social anxiety disorder uses a Great Dane as a service animal.⁹⁴ The Great Dane keeps people at a distance by growling at them and thereby makes the client feel better.

Facts from Case A: A dog is trained to pick up objects that a quadriplegic man needs. The court holds that, because the animal is trained to perform specific tasks that are not typical of the breed and that alleviate the effects of the man's disability, it qualifies as a service animal.⁹⁵

Facts from Case B: Two cats sit on a woman's lap and purr frequently, relieving her anxiety. The court holds that the cats, while making the woman feel better, do not perform specific tasks atypical of the breed. Therefore, the cats do not qualify as service animals.⁹⁶

To help students add factual analysis to the legal analysis they have already performed, they might consider which facts were material to the court's holding in the precedent cases, then categorize these facts

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93. See RESTATEMENT (SECOND) OF TORTS § 46 cmt. f, illus.13 (1965) (store clerk not liable to customer for intentional infliction of emotional distress when she tells the customer that she looks like a hippopotamus in a dress, even when customer is embarrassed and broods over the incident).
 94. This hypothetical is a modification of one originally created by Professor Sheila Miller of the University of Dayton Law School. The memorandum problem was included in the 2008 LWI Idea Bank.
 95. This is an invented case based on the requirements of 28 C.F.R. § 36.104 (2008) ("Service animal means any guide dog, signal dog, or other animal individually trained to do work or perform tasks for the benefit of an individual with a disability, including, but not limited to, guiding individuals with impaired vision, alerting individuals with impaired hearing to intruders or sounds, providing minimal protection or rescue work, pulling a wheelchair, or *fetching dropped items*.") (emphasis added) and *Prindable v. Ass'n of Apt. Owners of 2987 Kalakaua*, 304 F. Supp. 2d 1245, 1256–57 & n.25 (D. Haw. 2003) (outlining the requirements of the Fair Housing Act that an animal be individually trained and possessing of abilities "unassignable to the breed").
 96. This is an invented case based on the requirements of 28 C.F.R. § 36.104 (requiring animals to "perform tasks") as well as *Prindable*, 304 F. Supp. 2d at 1256–57 & n.25 (D. Haw. 2003) (involving dog that made owner feel better).

as corresponding to one end of the continuum or the other. Just as they did when establishing legal parameters, they should then write in the facts underneath the line they have drawn. By moving the law to the top of the line, they can see how the court's legal rules and the facts to which those rules were applied correspond and relate to each other.

Example 1:

Atrocious
Shocks the conscience

Insults
Rudeness

Using a racial slur

Calling
someone lazy

Comparing someone
to a zoo animal

Example 2:

Ameliorates effects
of disability

Makes owner
feel better

Performs specific
tasks not typical of breed

Picks up objects
for someone who cannot

Sits on lap and
purrs

After they have graphed out the law and facts of the precedent cases, students can consider their own client's facts. They might ask themselves: Are my client's facts more like the facts that did satisfy the rule, or more like the facts that did not? Then, just as they did when mapping out the legal rules, they might draw an "X" on the continuum to represent where their client's facts would fall in comparison to those in precedent cases. This "X" will represent their primary analysis.

Example 1:

Atrocious
Shocks the conscience

Insults
Rudeness

X

Using a racial slur

Calling
someone lazy

Comparing someone
to a zoo animal

Example 2:

Ameliorates effects
of disability

Makes owner
feel better

Performs specific
tasks not typical of breed

X

Picks up objects
for someone who cannot

Sits on lap and
purrs

After considering graphically that their client's facts are just as gray in relation to the facts of the other cases as they were in relation to the legal rules, they can now mark an "X" somewhere near the other end of the continuum to show how the court could reach the opposite conclusion—in other words, their counter-analysis will likely predict that the court could see their client's facts as more similar to those in the other set of cases.

Example 1:

Atrocious Shocks the conscience	Insults Rudeness
X	
Using a racial slur	Calling someone lazy
	Comparing someone to a zoo animal

Example 2:

Ameliorates effects of disability	Makes owner feel better
Performs specific tasks not typical of breed	
X	
Picks up objects for someone who cannot	Sits on lap and purrs

And, again, once they have used the graphic representation to help them visualize their counter-analysis, they can continue to draft their legal memorandum by including counter-analysis based on analogies and distinctions to the facts near which their new “X” is situated on the line, and consider using the position of the “X” on the line to inform the quality of the prediction.

D. The Fourth Step: Formulating Counter-Analysis Through the Rule Explanation

As a last step in formulating counter-analysis, students should consider whether the controlling jurisdiction has binding law on point. If not, students will have to rely on persuasive authority in formulating the rule. Often, especially in a law school hypothetical, different jurisdictions will have competing and conflicting rules.⁹⁷

97. See A LAWYER WRITES, *supra* note 9, at 93–94.

The student's job, therefore, is to explain each rule and its reasoning in the rule explanation, then decide which rule the court is more likely to follow (contrast this task to counter-analytic tasks described previously, where the counter-analysis is largely based in the application section of the organizational paradigm). Once they have predicted the rule the court will likely adopt, their counter-analysis will be predicated on the competing rule from the other jurisdiction(s).

Example:

Rule 1: Janush (N.D. Cal.): Even a non-service animal may still be necessary to accommodate a person with a disability. Federal regulations do not say anything about a relationship between an animal qualifying as a service animal and being necessary. Defendants "have not established that there is no duty to reasonably accommodate non-service animals."⁹⁸

Rule 2: Prindable (D. Haw.): If an animal is not a service animal, it is not necessary as an accommodation for a person with a disability, because it does nothing to assist a disabled person in a relevant way.⁹⁹

In the case of competing persuasive authority, students will use the line representing the rule continuum slightly differently. At one end of the line, they should write in one persuasive jurisdiction's rule. At the other end of the line, they should write in the rule from the other persuasive jurisdiction.

Example:

Necessary even
if not s.a.

Not necessary
if not s.a.

Janush

Prindable

Then, below the line segments, students should write in each court's reasoning.

98. *Janush v. Charities House Dev. Corp.*, 169 F. Supp. 2d 1133, 1136 (N.D. Cal. 2000).

99. *Prindable*, 304 F. Supp. 2d at 1256-57.

Example:

Necessary even
if not s.a.

Not necessary
if not s.a.

Janush

Prindable

Nothing in reg.

Doesn't help person with
disability in relevant way

After graphing out their analysis, students should ask themselves which reasoning the court is likely to find persuasive and why. They should then draw an "X" nearer to the end of the continuum representing that reasoning.

Example:

Necessary even
if not s.a.

Not necessary
if not s.a.

X

Janush

Prindable

Nothing in reg.

Doesn't help person with
disability in relevant way

Thus, in formulating their counter-analysis, they should consider why the court may find the other jurisdiction's reasoning to be persuasive, then draw their "X" in an appropriate spot on the line to reflect the likelihood of the court reaching that conclusion.

Example:

Necessary even
if not s.a.

Not necessary
if not s.a.

X

Janush

Prindable

Nothing in reg.

Doesn't help person with
disability in relevant way

And, after studying the graphic representation of the competing rules and their own analysis of how the current court will weigh those rules, students may write their counter-analysis by noting that the court could choose to base its holding and reasoning on the persuasive rule near which the new "X" is situated on the line.

E. The Final Step: Formulating Refutation

Many students remember to include counter-analysis in their use of the organizational paradigm, but they neglect to return to the primary analysis to refute the possibility that the court will reach the opposite conclusion.¹⁰⁰ For a supervising attorney to predict accurately how a court might rule (whether for purposes of writing a brief, arguing a motion, or negotiating with opposing counsel), she must understand why the primary prediction is more grounded in the facts and law than the counter-prediction.

To help students formulate effective refutation, the professor might ask them to return to their graph of the primary analysis. Why did they place the "X" in the position on the line that they did? Making a list of their reasons for their primary predictions will help them order and organize their thinking.

Following the list, they can write their refutation by explaining in sentence or paragraph form the reasons they have articulated in their list. After visualizing the checklist, in fact, students may consider whether they want to place their "X" in a different point on the line. They may even decide that their counter-analysis should really be their primary analysis.¹⁰¹ This process leads to a deeper understanding of the materials and more thorough and credible analysis. Specifically, by giving students a checklist and asking them to graph their primary and counter-analysis, students will learn to apply to counter-analysis the basic legal analytic skills they have acquired: rule synthesis, rule parameters, analogy and distinction, and weight of authority.

V. CONCLUSION

The process of decision-making and reformation is a critical component of the process of legal analysis.¹⁰² This process is both challenging for new law students and continually evolving

100. See *supra* notes 29–38 and accompanying text.

101. See Ricks, *supra* note 3, at 14 (describing an assignment in which 15 of 42 students revised their predictions about the outcome of the hypothetical case).

102. See *supra* Part II.

throughout law school and the practice of law.¹⁰³ However, law students will never reach their fullest analytic potential without the ability to logically consider alternative arguments, juxtapose these alternative arguments against the primary argument, explain anomalies, and predict the outcome.¹⁰⁴

There are many psychosocial factors that may hinder a beginning law student's ability to see and effectively write both sides of the argument.¹⁰⁵ Social scientists who have studied argumentation and conceptual change theory have documented that using graphic organizers is helpful in teaching, and at the very least, assists with consideration and refutation of counter-arguments.¹⁰⁶ Through the use of the graphic representations of their analysis, students may find that they change their minds about which way the court is likely to decide the case.¹⁰⁷ By following the sequence set forth by the authors, students will likely find their analysis is more well-grounded and nuanced. For these reasons, law professors therefore would do well to incorporate cognitive theory and graphic organizers into their instruction.

103. *See supra* Part II.

104. *See supra* notes 21–26 and accompanying text.

105. *See supra* Part II.

106. *See supra* Part III.

107. *See supra* Part IV.E.