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Teaching in Reverse: A Positive Approach to Analytical Errors in 1L Writing

*Susan E. Provenzano and Lesley S. Kagan**

“I remember sitting alone in the worn urban classroom where my students had just written their first essays [T]he writing was so stunningly unskilled that I could not begin to define the task nor even sort out the difficulties. I could only sit there, reading and re-reading the alien papers, wondering what had gone wrong and trying to understand what I at this eleventh hour of my students’ academic lives could do about it.”

—Mina Shaughnessy, *Errors and Expectations*

“Why do they do what they do?”

—Anonymous law professor grading
first-year law students’ exams

I. INTRODUCTION

Grading novice writers’ papers and exams can leave even the most seasoned professors dismayed and disheartened. Legal writing professors are no exception, often discovering that their students’ work has gone astray in unexpected ways. Even after multiple conferences, countless classroom exercises, and rounds of professor comments, first-year law students¹ still struggle considerably with the fundamentals of legal analysis. Confronted with basic analytical shortcomings in their students’ papers, legal research and writing professors² can feel

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1. For the remainder of this article, we will refer to “first-year law students” as “1Ls.”

2. This article uses the shorthand “LRW professors” to refer to professors of legal research and writing.

dissatisfied with their own teaching,³ fretting that their students are stuck in a learning rut, or worse, are regressing. In response, LRW professors continue to schedule conferences, comment extensively on papers, and provide checklists and model papers for students to emulate—all essential components of the learning process.⁴ But the problems persist, suggesting that these efforts, on their own, are not enough.

This article proposes a new approach to remedying 1Ls' analytical errors based on a positive, rather than antagonistic, view of error.⁵ We suggest supplementing conventional pedagogies with additional student-centered teaching methods that require students to identify the analytical shortcomings of their own papers, armed with some up-front guidance about what errors they are likely to make as novice law students. Under this approach, instead of learning exclusively the

3. Nancy Soonpa, *Using Composition Theory and Scholarship to Teach Legal Writing More Effectively*, 3 J. LEGAL WRITING INST. 81, 81 (1997) ("Students everywhere follow patterns and make choices that their teachers never imagined, let alone encouraged or endorsed. Taking student failures and struggles personally can drive teachers to frustration, despair, and burnout."); Laurel Currie Oates, *I Know That I Taught Them How To Do That*, 7 J. LEGAL WRITING INST. 1, 1 (2001) ("Although we know that we have taught our students how to do something, they do not seem to be able to use what it is that we have taught them The frustrations that we have experienced are common ones.").

4. See generally Robin S. Wellford-Slocum, *The Law School Student-Faculty Conference: Towards a Transformative Learning Experience*, 45 S. TEX. L. REV. 255, 260 (2004) ("[S]tudent conference[s] can be one of the most important learning experiences of a law student's education."); Jane Kent Gionfriddo, *The "Reasonable Zone of Right Answers": Analytical Feedback on Student Writing*, 40 GONZ. L. REV. 427 (2004) (emphasizing the importance of providing pedagogically sound analytical comments); Sophie M. Sparrow, *Describing the Ball: Improve Teaching by Using Rubrics—Explicit Grading Criteria*, 2004 MICH. ST. L. REV. 1 (2004) (recommending rubrics, or explicit checklists of grading criteria, to enhance student learning); Carol McCrehan Parker, *Writing Throughout the Curriculum: Why Law Schools Need It and How to Achieve It*, 76 NEB. L. REV. 561, 583–84 (1997) (advocating that professors provide positive models of effective legal writing to their students); Judith B. Tracy, *"I See and I Remember; I Do and Understand": Teaching Fundamental Structure Through the Use of Samples*, 21 TOURO L. REV. 297 (2005) (advocating the use of samples throughout the LRW curriculum).

5. In this article, we use the term "error" to refer generically to legal writing that falls outside the law-trained audience's notions of acceptable legal analysis. As discussed *infra* Part V, we focus on the errors 1Ls commonly make while learning the core analytical components of legal writing problems with rule synthesis, explanations of precedent, and application of law to client facts. We realize that "error" may sound pejorative, and that it is rather broad in scope. However, we use the term because it mirrors the vocabulary coined by composition scholars whose philosophy and teaching techniques we advocate importing into the legal writing context. See, e.g., Barry M. Kroll & John C. Schafer, *Error-Analysis and the Teaching of Composition*, 29 C. COMPOSITION & COMM. 242, 242 (1978) (examining error analysis as a process to best determine the source of the student's error); David Bartholomae, *The Study of Error*, 31 C. COMPOSITION & COMM. 253, 256 (1980) (providing an overview of error analysis and how it benefits the writer and teacher).

components of *effective* analysis or realizing where they went wrong after-the-fact from professor comments, students engage in a guided discovery process⁶ that teaches them to identify and correct *ineffective* analysis before their assignments are graded.⁷ As a result, students acquire a deeper, earlier understanding of the skills they are expected to exhibit in their writing assignments.⁸ By identifying students' errors and using them as a teaching tool early in the writing process, LRW professors also combat the frustrations that arise when students believe that professors are "hiding the ball" by waiting to identify errors until the end of the writing process.⁹

The idea of taking a more up-front approach to error has gained some ground in the discipline of legal writing. A few legal writing scholars have argued that 1Ls' analytical errors are a necessary, and even desirable, byproduct of their efforts to learn legal analysis as they transition into a new discourse community.¹⁰ This error-as-growth philosophy is central to the teaching methods we advocate in this article. But viewing error as inevitable is not synonymous with putting ourselves at error's mercy. Because legal audiences expect upper-division students and law graduates to have achieved some level of analytical proficiency,¹¹ LRW professors must find ways to embrace

6. See James M. Hendrickson, *The Treatment of Error in Written Work*, 64 MOD. LANGUAGE J. 216, 217 (1980) ("[In teaching foreign languages] a discovery approach . . . help[s] students make inferences and formulate concepts about the target language, and . . . help[s] them fix this information in their long-term memories.").

7. The teaching methods we advocate are just as effective in ungraded LRW courses, where professors evaluate student performance on writing assignments with comments and individual conferences similar to those provided in graded LRW courses.

8. See *infra* Part VII (demonstrating the use of error analysis to teach in reverse).

9. When students do not have a clear sense of the variety of ways in which their analysis can go astray before submitting a paper for a grade, students may view LRW professors as "hiding the ball."

10. The novice law student must acclimate to the unfamiliar legal "community of discourse" comprised of the people who speak the language and follow the rules particular to critical legal thinking and problem solving. Joseph M. Williams, *On the Maturing of Legal Writers: Two Models of Growth and Development*, 1 J. LEGAL WRITING INST. 1, 2, 10 (1991) (positing that 1Ls' legal writing problems are "not only predictable, but for many students probably inevitable; indeed, [they] may be evidence of intellectual growth" as students replace the "habits of everyday thinking" with the habits of analytical legal thinking); see also Soonpa, *supra* note 3, at 85–86 ("[This view of error] helps foster a respect for students: an error based on thinking, however misdirected, is infinitely preferable to an error based on carelessness or irrationality."); J. Christopher Rideout & Jill J. Ramsfield, *Legal Writing: A Revised View*, 69 WASH. L. REV. 35, 75–76 (1994) (advocating a program that allows students to develop writing skills steadily throughout the last two years of law school because "if legal educators under the formalist view assume that one year is enough time to become proficient in the new discourse, they abandon students just as acculturation begins").

11. See Williams, *supra* note 10, at 1. Williams recounts law faculty's deep dissatisfaction

error as part of the learning process while simultaneously helping students to spot error and develop strategies for avoiding error in their own writing. Thus, LRW professors should not only adopt pedagogies that regard error dualistically as a necessary growing pain but also as a potential obstacle to communicating with a legal audience.

This article urges LRW professors to seize upon the dualistic nature of analytical error by using it to define the outer limits of legal analysis and to give students a clearer and earlier sense of where they are in the process of learning those limits.¹² In Parts II, III, and IV,¹³ we discuss the theories behind using error as a teaching tool. We examine existing treatments of 1L analytical error in the LRW field and propose moving current pedagogy even further by looking to the closely related field of composition,¹⁴ where scholars have been employing a tool called “error analysis” to improve students’ writing for many years. Error analysts have documented the common grammatical and mechanical writing errors undergraduate, high school, and English as a Second Language (“ESL”) students often commit.¹⁵ The error analysts then examined the cognitive theories and thought processes that might explain these errors and designed reflective teaching methods that help students identify

with law students’ writing, and explains that “law firms regularly complain that the law schools aren’t teaching their graduates how to write or think critically.” *Id.*; see also Bryant G. Garth & Joanne Martin, *Law Schools and the Construction of Competence*, 43 J. LEGAL EDUC. 469, 488 (1993) (noting that legal employers expect law school graduates to be competent in oral and written communication skills as well as legal reasoning); Susan L. DeJarnatt, *Law Talk: Speaking, Writing, and Entering the Discourse of Law*, 40 DUQ. L. REV. 489, 507 (2002) (“A lawyer’s life consists of talking about written analysis, in conferences with supervisors, in meetings with clients, in settlement and mediation conferences, in oral argument.”).

12. Although effective legal analysis takes many forms, legal writing experts agree that it typically contains analytical components such as rules, explanations of those rules, and application of those rules to a set of facts, and expresses these components in a clear, concise, and organized fashion. See *infra* notes 106–07, 129–33 (discussing the core analytical skills needed for effective legal writing). This article uses the phrase “outer limits of legal analysis” to distinguish effective analysis, which conforms to these discourse community norms, from ineffective legal analysis, which departs from these norms. Examples of legal analysis that fall “outside the limits” are papers that omit rules, fail to explain case law, or fail to apply rules to client facts. See Error Chart *infra* pp. 177–85 (tracking 1L errors).

13. See *infra* Parts II–IV (closely examining error analysis).

14. Scholars in the field of composition study the process of teaching and learning writing. See Soonpa, *supra* note 3, at 82. Part III of this article examines composition scholars’ attempt to teach writing more effectively through error analysis, and Part IV of this article explains how the fields of composition and LRW are closely related and therefore how error analysis can also be applied to the teaching of LRW.

15. See generally MINA P. SHAUGHNESSY, *ERRORS AND EXPECTATIONS: A GUIDE FOR THE TEACHER OF BASIC WRITING* (1977) (discussing common student writing errors, possible causes, and potential remedies); Hendrickson, *supra* note 6 (identifying factors needed in error analysis process).

errors that violate the “rules” governing written English discourse. Because composition and written legal analysis are both process-oriented disciplines that have predictable structures tied to discourse community expectations, and because students transitioning into each field experience parallel learning challenges, we contend that error analysis is an appropriate tool for studying and improving 1Ls’ written legal analysis.

In Parts V, VI, and VII,¹⁶ we discuss how error can be used in a practical sense to improve 1Ls’ analytical writing. We begin by examining the results of our own error analysis. We document our experience with the most common errors in 1Ls’ objective writing assignments prepared in our classes, focusing primarily on small-scale analytical categories. This research is not a definitive or comprehensive study of 1L analytical error. However, it provides concrete confirmation of anecdotal discussions in legal method texts and articles about the faulty legal analysis we can expect from 1Ls. Following the methods of error analysts, we then review cognitive psychology and composition theories that account for 1Ls’ most profound thinking challenges, including the transfer-of-learning challenges, socialization challenges, and expert-novice reading and writing gaps. Finally, we explore the theoretical connections between missteps in thought and errors in writing.

Building on the teaching tools that error analysts have used to improve composition papers, this article proposes several methods for using student error constructively by “teaching in reverse.” These teaching methods use error as a starting point, then work backwards to find the student’s faulty thought processes that led to the error, with the ultimate goal of encouraging better choices at critical stages of the writing process. By investigating common errors and their connections to thought processes, and by using teaching tools that move students’ thinking in a more effective direction, we aim to ease LRW professors’ frustrations and to help students become proficient, self-sufficient legal analysts at an earlier stage.

II. CURRENT LRW APPROACHES TO 1L ANALYTICAL ERRORS

Decades removed from its original status as a legal bibliography course,¹⁷ legal writing has evolved into a sophisticated discipline

16. See *infra* Parts V–VII (exploring how error analysis can improve student writing).

17. David S. Romantz, *The Truth About Cats and Dogs: Legal Writing Courses and the Law School Curriculum*, 52 U. KAN. L. REV. 105, 128 (2003) (recounting the origins of legal writing programs in the early-to-mid 1900s); Sarah O’Rourke Schrup, *The Clinical Divide: Overcoming*

focused on teaching “thinking”¹⁸ and the fundamentals of legal analysis.¹⁹ In their quest to transform legal neophytes into more sophisticated analysts, LRW professors use a variety of process-oriented methodologies and active learning techniques,²⁰ and they draw regularly on pedagogical insights from other fields, including composition theory and cognitive psychology.²¹ Currently, the LRW approaches to 1L analytical errors can be organized roughly into three categories: (1) showing students how to use the components of legal analysis effectively, rather than ineffectively (e.g., “how to do it right” with error as the unstated but negative implication);²² (2) professor comments on

Barriers to Collaboration Between Clinics and Legal Writing Programs, CLINICAL L. REV. (forthcoming 2007) (manuscript at 8–24, on file with author) (contrasting the development of LRW programs with the development of clinical programs).

18. James B. Levy, *We Teach Thinking, Not Writing*, 17 SECOND DRAFT 12 (2003).

19. Tracy, *supra* note 4, at 305 (“[LRW professors teach students early in the semester] to identify . . . legal issues, read and analyze relevant authority, and derive an overall understanding of the issues based on a thorough synthesis of that authority. Through this process, students begin to develop fundamental analytical skills.”); Lisa Eichhorn, *Writing in the Legal Academy: A Dangerous Supplement?*, 40 ARIZ. L. REV. 105, 129 (1998) (“[LRW professors] invest a great deal of energy in trying to bridge the analytical gap by teaching explicitly the elements of legal reasoning: understanding the role of precedent; making analogies and distinctions; applying rules to facts. When students fail to master these skills, their problems are apparent in the writing they submit.”); Joseph Kimble, *On Legal-Writing Programs*, 2 PERSP. 43, 44 (1994) (“We have to teach, in the writing courses, the structure of analysis: how to analyze cases, how to connect one case to the other, and how to apply them by deduction or analogy to a client’s problem, a client’s story.”).

20. See, e.g., Parker, *supra* note 4, at 583–89 (suggesting the use of models, checklists, and context-specific activities to introduce students to legal analysis); Steven J. Johansen, “*What Were You Thinking?*”: *Using Annotated Portfolios to Improve Student Assessment*, 4 J. LEGAL WRITING INST. 123 (1998) (advocating for reflective self-assessment by students during the writing process via the use of portfolios); 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 (2003) (proposing using active learning techniques to more effectively teach students with differing learning styles).

21. See Mary Kate Kearney & Mary Beth Beazley, *Teaching Students How to “Think Like Lawyers”*: *Integrating Socratic Method with the Writing Process*, 64 TEMP. L. REV. 885, 888 (1991) (urging LRW professors to “exploit the vast research into rhetoric and composition pedagogy that has been conducted over the last forty years”); Linda L. Berger, *Applying New Rhetoric to Legal Discourse: The Ebb and Flow of Reader and Writer, Text and Context*, 49 J. LEGAL EDUC. 155, 165–66 (1999) (using the New Rhetoric movement in composition as a basis for teaching legal writing with a process approach); Oates, *supra* note 3, at 1–3 (using transfer theories from cognitive psychology to craft effective legal writing pedagogy); Schrup, *supra* note 17 (manuscript at 16–18) (explaining how New Rhetoric theory factors into legal writing pedagogy). See generally Soonpa, *supra* note 3, at 81–82 (pointing out the common patterns of students’ choices and failures, as well as teacher frustrations, in the fields of composition and legal writing).

22. Parker, *supra* note 4, at 583–84 (“To use models of legal writing effectively, teachers should try to provide more than one example of ‘good writing’ in a particular format By developing a list of the desirable attributes for a particular kind of document and asking students to evaluate the models against those criteria, teachers may help students recognize and emulate

student papers, which identify error after a paper is submitted and may also explain how to improve the analysis;²³ and (3) less frequently, the use of deficient samples to contrast effective from ineffective analysis.²⁴ Although each of these teaching tools plays a vital role in developing 1Ls' analytical skills, both students and professors would benefit from a more up-front, comprehensive, and reflective approach to 1L analytical error.

LRW professors often teach legal analysis beginning with analytical formulas that are some variation on IRAC, emphasizing the importance of organizing an analysis around legal issues, synthesizing rules of law for each issue, explaining cases to illustrate those rules, and then applying the law to the facts.²⁵ Students' learning is often supplemented with teaching tools such as editing checklists, model memoranda, and classroom exercises that reinforce the analytical structure expected by a legal audience.²⁶ But these "positive" teaching tools tend to focus more on what is effective, rather than contrasting the effective from the deficient for the purpose of defining the limits of legal analysis. For example, a typical checklist might ask students to evaluate whether their papers meet specific positive criteria (e.g., are your rules a clear, precise, well-developed, and accurate synthesis of the case law?),²⁷ while model memoranda stand as broad, though varied,

effective legal writing.").

23. See generally Gionfriddo, *supra* note 4 (exploring more effective commenting strategies for teachers of legal writing).

24. Tracy, *supra* note 4, at 315–22 (outlining a teaching exercise using a deficient example to help students "identify and appreciate what the presentation of legal analysis should include").

25. Christine M. Venter, *Analyze This: Using Taxonomies to "Scaffold" Students' Legal Thinking and Writing Skills*, 57 MERCER L. REV. 621, 624 (2006) ("If questioned about how they teach analysis, many legal writing faculty might respond that they teach it using 'CREAC' . . . , 'CRAC' . . . , 'IRAC' . . . , or any one of the acronyms used to describe the organizational formula . . . [which] involve[] extrapolating rules from cases and applying them to the facts of the case at hand.").

26. Johansen, *supra* note 20; Parker, *supra* note 4, at 583–84 (discussing samples generally and "models of effective legal writing"); Terry Jean Seligmann, *Why is a Legal Memorandum Like an Onion?—A Student's Guide to Reviewing and Editing*, 56 MERCER L. REV. 729, 730–31 (2005) (discussing LRW professors' use of checklists or comment sheets and the dangers inherent in relying on them as formulas that must be slavishly followed); Sparrow, *supra* note 4, at 6 (suggesting the use of rubrics and explicit grading sheets); Jo Anne Durako et al., *From Product to Process: Evolution of a Legal Writing Program*, 58 U. PITT. L. REV. 719, 724–25 (1997) (advocating process-model innovations, such as editing checklists, faculty-written sample memoranda, self-evaluation forms, and two-part peer editing assignments).

27. See Durako et al., *supra* note 26, at 748–49, app. A. This article's "Memorandum Editing Checklist" asks similar questions, such as "did you . . . (b) apply the legal principles in [the controlling and persuasive authority] to the facts of your problem? (c) draw analogies and distinctions to the precedents? (d) objectively evaluate and explore all credible interpretations?"

positive exemplars for students to compare to their own work.²⁸ Through positive teaching tools, 1Ls learn the many different ways that legal analysis can go right, but see fewer contrasting varieties of how their own legal analysis is likely to go wrong.²⁹

Professor comments on students' papers and one-on-one conferences also play important roles in the LRW curriculum.³⁰ Yet both composition and LRW scholars acknowledge that dealing with error through professor comments is a tricky business.³¹ For instance, some scholars maintain that even thoughtful professor comments play only a marginal role in improving students' writing,³² and many articles have documented how difficult it is to craft comments that effect real improvement.³³ Comments, as well as post-submission student

28. Tracy, *supra* note 4, at 308 n.25, 314 n.36, 317 n.40, 327 n.51, 330 n.55 (citing several authorities advocating the use of good samples in English composition and in LRW classes and explaining that using a range of effective sample memoranda throughout the semester helps to "demonstrate, generally, the structure and organizational approach expected in an objective legal document"); see Andrea McArdle, *Teaching Writing in Clinical, Lawyering, and Legal Writing Courses: Negotiating Professional and Personal Voice*, 12 CLINICAL L. REV. 501, 519 (2006) ("I have come to think that the more specimens legal writers see, the less risk there is that they will perceive legal writing to be entirely formulaic Just as wide reading of general literature tends to improve overall literacy, reading a range of legal briefs and memoranda can illuminate the discursive possibilities—rather than the supposed limitations—of legal writing.").

29. This is not to suggest that LRW professors approach their curricula in anything less than a thoughtful, reflective, and pedagogically sound manner. See Tracy, *supra* note 4, at 299 n.8 (pointing out the substantial and influential LRW scholarship on legal research and writing pedagogy). Indeed, LRW professors are well-attuned to students' needs for incremental, structured learning and have developed many effective and creative routes for moving students up the analytical learning curve. Rather, this article suggests that we can supplement these teaching tools and improve our methods by drawing on additional insights from related fields.

30. Johansen, *supra* note 20 (suggesting that student-annotated portfolios can raise the effectiveness of commenting and conferences); Parker, *supra* note 4, at 586–87 (discussing commenting generally); Gionfriddo, *supra* note 4 (discussing the types of comments LRW professors should be giving on memoranda); Anne Enquist, *Critiquing and Evaluating Law Students' Writing: Advice from Thirty-Five Experts*, 22 SEATTLE U. L. REV. 1119, 1125–29 (1999) (reporting that experienced LRW professors feel commenting is one of the most important tasks LRW professors undertake).

31. Soonpa, *supra* note 3, at 96 ("Writing teachers spend so much time on an activity that is little understood: what is thoughtful commentary and what comments actually help."); see also Brooke K. Horvath, *The Components of Written Response: A Practical Synthesis of Current Views*, 2 RHETORIC REV. 136, 136 (1985) ("Yet valuable as we believe our penciled comments to be, this time-consuming, difficult task proves too frequently a confused, unsatisfying experience for us; worse, our efforts prove too often apparently unhelpful to students."); Hendrickson, *supra* note 6, at 216 ("[P]roviding all the correct forms in students' imperfect sentences is a time-consuming ordeal that can also be frustrating to teachers . . . [and] disconcerting [to students].").

32. See Soonpa, *supra* note 3, at 101 (noting some scholars have this viewpoint).

33. See *id.* at 96–101 (acknowledging that comments are not always effective in improving analysis); Enquist, *supra* note 30, at 1130–45 (noting commenting methods that experienced LRW professors find most helpful, but acknowledging other methods that can be detrimental to students' learning); *infra* Part V.B (our error analysis results suggesting that errors persist despite

conferences,³⁴ also take a back-end approach to analytical error, telling students what they need to improve upon after the fact, rather than giving students the opportunity to see how their analysis might go wrong in advance of submitting an assignment. In addition, comments assume a teacher-directed stance toward error—a “don’t do it this way, do it that way”³⁵ approach—that gives students less freedom to acquire their own sense of where (and whether) their analysis falls within the spectrum of acceptability.³⁶

Some LRW professors take a more overt approach to student error by using examples of ineffective analysis in the classroom.³⁷ This approach is consistent with research in the field of instructional psychology touting the benefits of contrasting “positive” instructional examples, which focus on what is correct or effective, with corollary “negative” examples³⁸ to help students understand the range of acceptable variations on a concept or rule.³⁹ In classes using deficient

our teaching and commenting efforts).

34. See *infra* Part VII.B (noting that pre-submission conferences provide a wealth of opportunities for using student error constructively).

35. Gerald Grow, *Teaching Writing Through Negative Examples*, 6 J. TEACHING WRITING 239, 239 (1987).

36. But see Soonpa, *supra* note 3. Soonpa advocates that professor comments be crafted to use students’ errors more constructively, considering the audience, student goals, and the origin of the errors in providing the “tools and techniques that enable the student to carry out a writer’s responsibility and privilege.” *Id.* at 103–04.

37. Tracy, *supra* note 4; Stewart Harris, *Giving Up Grammar and Dumping Derrida: How to Make Legal Writing a Respected Part of the Law School Curriculum*, 33 CAP. U. L. REV. 291, 303 (2004) (“I select a good student-submitted outline and project it up on the whiteboard, and we edit it together, in class.”).

38. In the vernacular used in these studies, the terms “positive” and “negative” are not synonymous with “correct” and “erroneous,” or “effective” and “ineffective,” but instead refer to examples that fit within the concept or rule being taught and examples that fall outside the concept or rule being taught. See Paul A. Haack, *Use of Positive and Negative Examples in Teaching the Concept of Musical Style*, 20 J. RES. MUSIC EDUC. 456, 456 (1972) (examining the results of both positive and negative examples in the music education setting). As applied to legal analysis, however, these terms take on different connotations, referring to effective examples of legal analysis versus legal analysis that falls short of a legal audience’s expectations.

39. Ali M. Ali, *The Use of Positive and Negative Examples During Instruction: Some Important Issues Related to the Design and Development of Instructional Materials*, 6 J. INSTRUCTIONAL DEV. 2, 2 (1981) (“In recent years, the importance of providing students with both positive and negative examples during instruction has been widely recognized and strongly emphasized by many instructional psychologists.”). For example, a study in the field of music examined junior high school students’ ability to learn broad musical stylistic concepts through exposure to contrasting types of music—some that fit within the musical era the students were studying and some that did not. Haack, *supra* note 38, at 458–59. In the experimental group, music teachers pointed out specific musical elements typical of the era the students were studying—the Romantic period—and contrasted them with elements from other eras. *Id.* In the control group, students were exposed exclusively to examples of Romantic musical pieces and taught only the elements of Romantic music. *Id.* While both groups improved in their ability to

examples, 1Ls may make large-scale comparisons between an effective and ineffective sample based on a legal question different from the assignments they are working on, may simply react to a deficient sample,⁴⁰ or may contrast effective and ineffective samples from excerpts of an assignment that they have already submitted.⁴¹ These exercises contrasting positive and negative examples help students to develop a general sense of the outer boundaries of legal analysis.⁴²

But these exercises are not necessarily tailored to the specific kinds of errors that 1Ls—as opposed to lawyers or hypothetical law students—are likely to make in a current assignment. In cases where the exercises are tied to the errors found in the students' own work, they are not usually presented up front in the teaching process. The deficient samples are typically accompanied neither by an explanation of *why* 1Ls are likely to make specific analytical errors, nor by an immediate opportunity for students to apply that contrast to their own work. To fully realize the benefits of their own errors and to become self-directed adult learners,⁴³ students need a framework that allows them to discover

classify music as Romantic or non-Romantic, the experimental group's gains exceeded the control group's by 75%, suggesting that "the negative examples used with the experimental group served to limit the concept and thus to define it more effectively." *Id.* at 460–61.

40. Of the legal writing scholars who have discussed using law student error constructively, Nancy Soonpa comes closest to adopting a teaching-in-reverse philosophy. See Soonpa, *supra* note 3, at 95–96. After explaining how composition theorists distinguish effective, expert, reader-based writing from ineffective, novice, writer-based writing, Soonpa suggests that LRW professors use examples of writer-based writing in classroom group work so that "students begin to recognize its characteristics and then revise it into reader-based writing." *Id.* at 96. Soonpa's primary focus, however, is on teacher commenting, and the ways in which professors can shape their comments around a constructive, rather than negative, view of student error. *Id.* Our approach builds on Soonpa's positive view of error, but differs in that we propose using error as a starting point, examining thought-error connections early on, and shifting the task of error identification to the students before they submit their papers.

41. See, e.g., Tracy, *supra* note 4, at 318–22. Tracy recommends an excellent exercise where students contrast a deficient sample analysis from an effective sample analysis, and states that "[s]tudents are able to apply [this learning] to the completion of their first assignment." *Id.* at 321. We propose taking this idea further by using various contrasting examples on each component of legal analysis, tailoring it to the students' own work, explaining the "why" behind the errors, and guiding students through the discovery process of applying the contrasts to their current work. See *infra* Part VII.A (providing a process for teaching in reverse).

42. Cf. Haack, *supra* note 38, at 461 (suggesting that contrasting musical examples help limit concepts for music students); Ali, *supra* note 39, at 2 (noting that use of positive and negative examples prevents students from coming to too narrow or too broad an understanding of a concept).

43. See Schrup, *supra* note 17 (manuscript at 13) (quoting Fran Quigley, *Seizing the Disorienting Moment: Adult Learning Theory and the Teaching of Social Justice in Law School Clinics*, 2 CLINICAL L. REV. 37, 50 (1995)). Explaining that 1Ls are sophisticated, educated adults, Schrup examines how clinical professors have used adult learning theory, which focuses on student-centered and practice-oriented teaching techniques, to provide students with successful

what aspects of their own work need the most attention and to apply that knowledge before facing grade consequences. The ultimate challenge is to help students understand that errors are a necessary and even desirable part of the drafting and learning process.

We can move the current state of LRW pedagogy on 1L analytical error further ahead to help 1Ls develop a more personal, more concrete, and earlier understanding of whether their writing conforms to the expectations of the law-trained audience. For comprehensive guidance on working with student error more productively, we need only look to the field of composition, where scholars have used “error analysis” successfully to improve students’ writing for years.

III. ERROR ANALYSIS: WORKING BACKWARDS FROM PRODUCT TO THOUGHT THEN FORWARD TO TEACHING

Error analysis, a creature of cognitive composition theory,⁴⁴ represented a shift in the field of composition’s efforts to teach writing more effectively. Viewing students’ errors as positive, necessary steps toward functional (and eventually expert) writing, error analysts turned the traditional negative-reactive approach toward error on its head. The error analysts fought age-old temptations simply to mark errors in student papers, and instead dove headfirst into studying the nature and frequency of students’ errors and the reasons behind them. The error analysts reversed teaching methods as well, taking error from the back end to the front end of the teaching process and educating students about their error tendencies during drafting stages, not through red marks on a final paper.

The next section briefly examines the development of error analysis and its philosophy and teaching methods as conceived in the field of composition. It sets the foundation for our argument in section IV, which advocates bringing the error analysts’ methods into the LRW classroom.

A. *The Basic Writing Experience*

Error analysis first gained widespread recognition in the 1970s with the advent of “Basic Writing” programs.⁴⁵ These programs were part and parcel of the “open admissions” programs instituted in many colleges in the late 1960s and early 1970s. These colleges admitted

strategies for directing their own learning in clinical courses. *Id.*

44. Kroll & Schafer, *supra* note 5, at 242–43.

45. SHAUGHNESSY, *supra* note 15, at 1; Kroll & Schafer, *supra* note 5, at 242.

students who did not meet the college's traditional standards and typically funneled those students into freshman Basic Writing classes.⁴⁶ Basic Writing students had difficulty with even the most elementary of writing skills, from handwriting and punctuation to vocabulary and subject-verb agreement.⁴⁷ Bewildered by the dizzying array of errors that intruded repeatedly on these students' sentences,⁴⁸ Basic Writing professors struggled to bring these students' writing up to par with their peers in just a couple of semesters.⁴⁹ The professors' task was compounded by two additional problems. First, their students' errors were a strain resistant to traditional product-focused teaching methods. Second, the professors lacked studies, guides, or textbooks to help them navigate this new "pedagogical West."⁵⁰

46. SHAUGHNESSY, *supra* note 15, at 1. Composition scholars describe the founding of Basic Writing programs, which originated with the City University of New York's ("CUNY") revolutionary open admissions policy, as "crucial historically in the development of composition." Bruce Horner, *Discoursing Basic Writing*, 47 C. COMPOSITION & COMM. 199, 199-200 (1996). Basic Writing developed during the political, cultural, and social movements in the 1960s and was itself a "writing movement" addressing 'broad questions about the aims of education and the shape of various educational institutions' and having as its focus 'the revitalizing of the teaching of writing.'" *Id.* at 199 (quoting James Slevin, *Depoliticizing and Politicizing Composition Studies*, in THE POLITICS OF WRITING INSTRUCTION: POSTSECONDARY 1-21 (Richard Bullock & John Trimbur eds., 1991)). The Basic Writing movement refused to label students who did not meet traditional admissions standards as "illiterate," "remedial," or "unskilled"; instead, the movement viewed these non-traditional students as simply "beginners," *id.* at 210, and sought to "bring them into the fold of collegiate education." *Id.* at 205; *see also* Mina P. Shaughnessy, *Diving In: An Introduction to Basic Writing*, reprinted in THE WRITING TEACHER'S SOURCEBOOK 94 (4th ed. 2000) (discussing the stereotypes that accompany basic writing including "remedial, developmental, pre-baccalaureate, or even handicapped English"). Supporters of open admissions contended that colleges could "maintain and enhance [their] standards of academic excellence," while "offer[ing] admission to some University program to all high school graduates" and "provid[ing] for remedial and other supportive services for all students requiring them." Horner, *supra*, at 204 (citing CUNY's admissions policy). Open admissions had many detractors, however, who blamed such programs for lax standards and viewed the programs' beneficiaries with disdain. *Id.* at 202. A well-established discipline today, Basic Writing and its professors were originally marginalized, denied sufficient teaching resources, and generally viewed as "remedial" drains on resources. *Id.* at 207, 211, 213, 216. This is not unlike how many LRW programs were viewed in their early years, and, in some cases, still are. *See* Romantz, *supra* note 17, at 134-36 (explaining that in the 1960s, '70s, and '80s, legal writing courses "remained marginal and peripheral," and that a 2002 Association of Legal Writing Directors and Legal Writing Institute survey of legal writing programs revealed "that the academy continues to view legal writing courses as anti-intellectual, practical (in the pejorative sense), and separable").

47. *See generally* SHAUGHNESSY, *supra* note 15 (outlining common writing errors and possible cures).

48. *Id.* at 3 ("[T]he essays these students wrote during their first weeks of class stunned the teachers who read them. Nothing, it seemed, short of a miracle was going to turn such students into writers.").

49. *Id.*

50. *Id.* at 3-4; *see also* Horner, *supra* note 46, at 216 (noting the "basement conditions" under

Into the void stepped error analysis, a concept refined by composition scholar Mina Shaughnessy in her landmark *Errors and Expectations*, a text borne of her experience teaching Basic Writing.⁵¹ Shaughnessy refused to accept her peers' widely held belief that Basic Writing students were "ineducable,"⁵² concluding instead that these students are "beginners and must, like all beginners, learn by making mistakes."⁵³ Her conclusions were based on her study of recurring writing errors in approximately 4000 placement essays drafted by incoming Basic Writing students.⁵⁴ Shaughnessy charted these errors—primarily grammatical and mechanical—and categorized them according to type.⁵⁵ Designed to help new professors make sense of the "chaos of error," *Errors and Expectations* posited that the stable of common errors found in these essays were both logical and predictable.⁵⁶ New professors were urged to treat common errors as the product of rational choice in an effort to master new skills rather than the result of uninformed whimsy, ignorance, or lack of effort.⁵⁷ To Shaughnessy,

which many Basic Writing programs operated in the 1970s and '80s).

51. Shaughnessy, who taught at the City University of New York, was a central figure in the Basic Writing movement. Her tome *ERRORS AND EXPECTATIONS* was hailed as the "'gospel' of basic writing" and was credited with "having 'almost on its own established basic writing as an important subfield within composition.'" Horner, *supra* note 46, at 207 (citing LESTER FAIGLEY, *FRAGMENTS OF RATIONALITY* (1992)); see also Linda Flower, *Writer-Based Prose*, 41 C. ENGLISH 19, 30 (touting *ERRORS AND EXPECTATIONS* as "the most imaginative, comprehensive, and practical book to be written on the basic writer"). Shaughnessy's work fomented an entirely new discipline within composition studies and bred new and influential academic publications, such as the *Journal of Basic Writing*. Horner, *supra* note 46, at 207.

52. SHAUGHNESSY, *supra* note 15, at 3, 5.

53. *Id.* at 5.

54. *Id.* at 2, 4–5.

55. See generally Horner, *supra* note 46 (discussing Shaughnessy's impact on composition). Examples of common basic writing errors include "ubiquitous" use of ambiguous referents in writing, such as undefined "he's, she's, and it's," unstated sentence subjects, sentence fragments, and the presence of "code words" that hold meaning only for the writer, not the reader. Flower, *supra* note 51, at 30 (summarizing common errors charted in *ERRORS AND EXPECTATIONS*); see also SHAUGHNESSY, *supra* note 15, ch. 4–7 (discussing in detail Basic Writers' common errors). Although Shaughnessy conducted the most comprehensive modern study of basic writing errors, educational researchers began creating error taxonomies and charting the frequency of students' writing errors as early as 1910, producing over thirty error studies in the era's "great heyday" between 1915 and 1935. Robert J. Connors & Andrea A. Lunsford, *Frequency of Formal Errors in Current College Writing, or Ma and Pa Kettle Do Research*, 39 C. COMPOSITION & COMM. 395, 397 (1988). These studies, however, did not delve into the cognitive causes of error as Shaughnessy's and other error analysts' work does.

56. SHAUGHNESSY, *supra* note 15, at 5 ("[A] closer look will reveal very little that is random or 'illogical' in what [Basic Writers] have written.").

57. *Id.* at 5; see also Bartholomae, *supra* note 5, at 256–57 ("Shaughnessy [found] predictable patterns in the errors she studied . . . [suggesting that] even the most apparently incoherent writing . . . is evidence of systematic, coherent, rule-governed behavior.").

just as important as identifying common errors was understanding *why* students make them repeatedly. Shaughnessy proposed tailoring teaching methods to redirect students' thinking and move past the errors.⁵⁸

B. The Expansion of Error Analysis and Process-Oriented Teaching

In the 1970s and '80s, error analysis spread quickly from Basic Writing to other composition sub-fields, such as second-language acquisition,⁵⁹ college journalism studies,⁶⁰ general college composition,⁶¹ and even high school English.⁶² In each of these sub-fields, scholars began subscribing to Shaughnessy's optimistic, enlightened view of error. At the same time, the field of composition as a whole was experiencing a wider shift in emphasis from product to process.⁶³ Under the old "product-oriented" teaching model, teachers focused on form and mechanics and aimed for students to get it "right" the first time.⁶⁴ "Process-oriented" teaching, in contrast, viewed writing as a dynamic, recursive endeavor, which valued students' thinking processes and drafting stages.⁶⁵

58. SHAUGHNESSY, *supra* note 15, at 6.

59. See, e.g., Hendrickson, *supra* note 6, at 216–18 (evaluating usefulness of error analysis to second-language learners); Kroll & Schafer, *supra* note 5 (applying insights from error analysis in the ESL context).

60. See, e.g., Grow, *supra* note 35 (promoting the "creation of negative examples" because "[d]eliberately doing something wrong removes the threat of failure").

61. See, e.g., Connors & Lunsford, *supra* note 55 (analyzing college students' essays from the 1980s); Muriel Harris, *Modeling: A Process Method of Teaching*, 45 C. ENGLISH 74 (1983) (using error analysis as a diagnostic tool in the college composition context); Horvath, *supra* note 31, at 136 (summarizing and synthesizing guidelines for effectively responding to student papers).

62. See, e.g., James Christopher Davis, *New Teachers Workshop: Developing a Classroom System of Error Analysis*, 77 ENG. J. 64 (1988) (describing use of error analysis in a high school classroom); Lois Matz Rosen, *Developing Correctness in Student Writing: Alternatives to the Error Hunt*, 76 ENG. J. 62 (1987) (promoting error analysis as one method for improving high school students' understanding of mechanics and grammar).

63. Kroll & Schafer, *supra* note 5, at 242 (noting the shift toward process in error analysis); Soonpa, *supra* note 3, at 83–85 (recounting composition's strong emphasis on process over product beginning in the 1970s).

64. Kroll & Schafer, *supra* note 5, at 242 (describing product-oriented teachers' intolerance of error); Soonpa, *supra* note 3, at 83–84 (discussing the product approach's emphasis on "get[ting] students' texts to match some ideal").

65. Kroll & Schafer, *supra* note 5, at 242–43. Process-oriented error analysts view errors in students' writing as "clues to inner processes, as windows into the mind." *Id.* at 243. Errors also help to "identify the cognitive strategies that the learner is using to process information"; errors are also "good for the learner because . . . 'You can't learn without goofing.'" *Id.* (quoting Heidi C. Dulay & Marina K. Burt, *You Can't Learn Without Goofing: An Analysis of Children's Second Language Errors*, in ERROR ANALYSIS 95–123 (Jack C. Richards ed., 1974)); see also Kearney & Beazley, *supra* note 21, at 888–89 ("[Process-oriented teachers believe that by] follow[ing] the

Process-oriented teaching and the cognitive approach of error analysis converged in several key tenets about old and new approaches to students' writing errors.⁶⁶ Most fundamentally, the new approach challenged traditional teacher attitudes toward error. The "old" product-oriented school of thought viewed errors in a one-dimensional fashion—as pure negatives to be corrected in a student's final product and internalized by the student.⁶⁷ Under this view, charting error patterns served only to "produce a linguistic taxonomy of what errors learners make,"⁶⁸ rather than to understand what forces contributed to the error. The product approach was teacher-centered, with the professor acting as omnipotent error-marker and the students acting as vessels of the professors' dictates.⁶⁹

In marked contrast to the product approach, process-oriented error analysts viewed error constructively and adopted a student-centered perspective. Errors were charted not for the sake of designing a taxonomy of failures, but instead to understand "what a writer *does*"—

process forward from blank page to final draft [they] learn something of what happens . . . ' [Those teachers] 'stop time' and give their students feedback throughout the composing process.") (quoting Donald M. Murray, *Writing as Process: How Writing Finds Its Own Meaning*, in EIGHT APPROACHES TO TEACHING COMPOSITION 3 (Timothy R. Donovan & Ben W. McClelland eds., 1980)).

66. See Rosen, *supra* note 62, at 68 ("[O]ver the past decade, writing teachers and theorists have developed a body of techniques that can be termed a process-oriented approach to correctness, methods that help students master the mechanical/grammatical aspects of writing itself"); see also Kroll & Schafer, *supra* note 5, at 243 (presenting a helpful chart that contrasts the product and process approaches to student error in the ESL context).

67. Rosen, *supra* note 62, at 62–63. Rosen characterizes the traditional approach toward error as one of "eradication," where teachers focused on "mechanical and grammatical correctness through drill exercises in grammar/usage texts" and "point[ed] out all errors when marking student papers," even though "numerous research studies show that there is little or no transfer of learning from isolated drills to actual writing experiences" and that "the teacher's 'error-hunt' does not produce more mechanically perfect papers." *Id.* at 62. Other scholars pointed out that from the students' perspective, it is "disconcerting to receive a 'corrected' composition with many words crossed out, new words added, and an array of marginal comments" Hendrickson, *supra* note 6, at 216.

68. Kroll & Schafer, *supra* note 5, at 243 (emphasis omitted). "At the product end of the spectrum, many teachers simply corrected individual errors as they occurred, with little attempt to see patterns of errors or to seek causes in anything other than learner ignorance." *Id.* at 242.

69. *Id.* at 242–43. Supporters of the product-oriented approach claimed that if teachers simply target errors with their comments and students try harder to eliminate them by "establishing correct, automatic habits" in response to teacher comments, students' writing skills will flourish. *Id.* at 243 see also Kearney & Beazley, *supra* note 21, at 888. As Kearney and Beazley explain, product-oriented teachers "taught students the rules for good writing" and evaluated the final product for adherence to those rules. *Id.* "Students were to learn by emulating good writing and by applying the teacher's critique of one assignment to their work on the next, different assignment." *Id.*

and why.⁷⁰ Shaughnessy and her cohorts in other composition sub-fields did not readily attribute students' writing errors to carelessness or ignorance. They did not view errors as something to be avoided or simply marked on a final paper. Instead, they viewed errors "as necessary stages in all language-learning, as the product of intelligent cognitive strategies," and therefore as opportunities—opportunities to understand students' thinking and to apply that insight to encourage better choices during the writing process.⁷¹ Through its deeper study of student writing processes, error analysis also empowered students;⁷² it allowed them to see errors as deliberate, even necessary steps forward in skill development.⁷³

C. The Error Analysts' Positive Use of Error to Improve Students' Writing

Putting this new view of error into practice, the error analysts adopted a tripartite strategy for improving the grammatical and mechanical aspects of their students' writing.⁷⁴ First, the error analysts sought to study and educate their students about errors that are most prevalent at specific learning stages, primarily by tracking the errors in their own students' work.⁷⁵ Documenting and using real student errors helped

70. Bartholomae, *supra* note 5, at 258.

71. Kroll & Schafer, *supra* note 5, at 244. "We have begun to view errors as exceptionally interesting clues to the linguistic and cognitive processes that function unobserved." *Id.* at 242; see also Bartholomae, *supra* note 5, at 257 ("Error analysis begins with a theory of writing, a theory of language production and language development, that allows us to see errors as evidence of choice or strategy among a range of possible choices or strategies.").

72. Rosen, *supra* note 62, at 64 ("When students view early drafts of their work as fluid, rather than fixed, they are free to concentrate on what they wish to say.").

73. *Id.* (arguing that high school English teachers should not comment on grammatical and mechanical errors early in their students' writing process and that they should instead "have a certain tolerance for error, accepting it as a normal part of writing growth"); see also Hendrickson, *supra* note 6, at 217 ("[W]illingness to use a foreign language—and to make errors—is one characteristic of a successful language learner.").

74. See Rosen *supra* note 62, at 68 (breaking down the error-analysts' three-part approach as "look[ing] for patterns in the errors of an individual student, tr[ying] to discover how the student arrived at the mistake . . . and plan[ning] [teaching] strategies accordingly").

75. Kroll & Shafer, *supra* note 5, at 247 (recommending teachers in the ESL field use "a good system of keeping records of errors," and stating that "teachers can deal with common errors in class"); see also Hendrickson, *supra* note 6, at 217 (emphasizing the need to give students new to a foreign language "specific clues about their errors"). For high school English classes, Rosen recommends "brief ten-minute lessons on common mechanical problems . . . taught as part of an editing workshop," though she points out that her teaching methods "are equally effective with secondary level and college students." Rosen, *supra* note 62, at 65–66. Drawing on Rosen's methods, James Christopher Davis kept cards that listed his high school students' writing errors, creating both individual "error profiles" and "a fairly complete list of the errors being made in [his] class." Davis, *supra* note 62, at 65. He eventually tabulated his students' five most

“new teachers understand what probably needs to be taught” because “these are the actual mistakes students are making,” rather than teaching through textbook examples with less immediacy for the students.⁷⁶ Second, the error analysts tried to understand the “thinking” problems behind the errors,⁷⁷ focusing primarily on cognitive missteps⁷⁸ as a result of students’ unsuccessful efforts to approximate new forms of discourse.⁷⁹ Third, the error analysts devised teaching methods that reassured students that errors are a necessary and natural part of a novice writer’s learning process,⁸⁰ but that helped students discover their own ways of moving past the errors.⁸¹

common mechanical errors, revealed them to his students, and used them as “intervention strategies” in class and conferences. *Id.* In 1988, Robert J. Connors and Andrea Lunsford published a much larger and more comprehensive study of common student writing errors, but at the college level. See generally Connors & Lunsford, *supra* note 55. The authors conducted the study, in part, because “every teacher has his or her ideas of what errors are common and important, but testing those intuitive ideas is something else again.” *Id.* at 396. Indeed, some of the results surprised the authors, who found that some errors were more common than they had thought, while others were less prevalent. *Id.* at 401.

76. Davis, *supra* note 62, at 65.

77. Kroll & Schafer, *supra* note 5, at 247 (recommending that teachers “discuss why the writer might make such a mistake . . . [and] try[] to analyze the sources of particular errors”).

78. *Id.* at 243 (“[E]rrors help the teacher identify the cognitive strategies that the learner is using to process information”); see Hendrickson, *supra* note 6, at 220 (“[Foreign language teachers should] [t]ry to discover the cause of students’ errors by discussing their compositions with them . . . [because] [u]nderstanding why particular errors occurred on one composition is an initial step in helping students to avoid similar errors on future compositions.”); Rosen, *supra* note 62, at 68 (suggesting that teachers analyze each error’s potential causes, querying whether they stem from, for example, “lack of knowledge about a certain grammatical point? A mis-learned rule? A careless error? Overgeneralization of a particular rule? The influence of oral language?”); see also Harris, *supra* note 61, at 74–76 (using a “‘thinking-aloud’ protocol, in which students are asked to say out loud everything they are thinking as they write,” as one method of examining the cognitive processes that underlie novice writers’ errors). Harris’ article draws on the research of Linda Flower and John R. Hayes, who conducted groundbreaking work into the writing processes of novice and expert composers by designing thinking-aloud protocols. See Linda Flower & John R. Hayes, *A Cognitive Process Theory of Writing*, 32 C. COMPOSITION & COMM. 365 (1981) (introducing a theory of cognitive processes involved in writing based on protocol analysis).

79. SHAUGHNESSY, *supra* note 15, at 137 (“[J]ust as the person who understands nothing about a motor must tamper blindly with this valve or that screw when the motor breaks down, so the student who is not conscious of the [conceptual frame within which to write] must make guesses or find inefficient ways of locating and finding his errors.”); Bartholomae, *supra* note 5, at 254 (characterizing beginning writers as writers “who need to learn to command a particular variety of language,” and contending that many of their errors are a “peculiar” and “idiosyncratic . . . approximation of conventional written discourse”).

80. “Novice” here refers to a student’s status in a particular discourse community, e.g., a non-native English speaker learning English for the first time, a Basic Writer learning new grammatical and mechanical rules, or a student writing in an unfamiliar genre.

81. Kroll & Schafer, *supra* note 5, at 244 (casting error analysts in the role of “investigat[ing] error . . . and then appl[y]ing these insights (to help the student move further toward the target

A variety of classroom and individualized teaching methods developed from this dualistic view that error is growth-in-progress yet still an “unprofitable intrusion[] upon the consciousness of the reader.”⁸² Error analysts (1) commonly held conferences during the drafting process to identify individual students’ errors and the thought processes producing them;⁸³ (2) presented examples of common errors in class, in contrast to “good” writing, and asked students to find and correct similar errors in their own drafts;⁸⁴ and (3) conducted in-class editing workshops that put students in the shoes of the reader, reacting to and diagnosing distracting errors.⁸⁵ Error analysts also used modeling, an educational psychology concept “in which a model demonstrates a particular behavior for observers to aid them in acquiring similar behaviors and attitudes.”⁸⁶ Either in class or conferences, error analysts modeled revision techniques on passages

form)”) (emphasis omitted). Rosen contends that students ought to remain primarily responsible for the “correctness” of their writing, and that they “learn to become accurate and self-sufficient writers by searching for, finding, and correcting their own mistakes.” Rosen, *supra* note 62, at 64. Teachers, she maintains, should assume the role of “coach/helper” rather than “drill sergeant/error-hunter.” *Id.*

82. SHAUGHNESSY, *supra* note 15, at 12.

83. Hendrickson, *supra* note 6, at 220; Horvath, *supra* note 31, at 138 (contrasting comments on a finished product, which “tend to judge, to describe, and to correct,” with discussions of error during individual conferences on drafts-in-progress, which “tend to be suggestions, questions, reminders, and assignments” and encourage students “to see revision as a desirable, necessary event”); Kroll & Schafer, *supra* note 5, at 247 (arguing that “periodic conferences, in which the teacher can present evidence for the error from the student’s papers, summarize the conclusions about the possible sources of the error, and start the student working on materials specifically geared toward the error” are more productive than “extensive annotations on papers”); Rosen, *supra* note 62, at 66.

84. Hendrickson, *supra* note 6, at 220; Kroll & Schafer, *supra* note 5, at 247 (explaining that the classroom error samples should be accompanied by a group discussion of why writers might make such errors so that “students would begin to investigate their own errors”); Rosen, *supra* note 62, at 66–67 (suggesting that students share their found errors with the group to “get help from the shared knowledge of the entire class”).

85. Rosen, *supra* note 62, at 65; see Linda Flower, *Revising Writer-Based Prose*, 3 J. BASIC WRITING 62, 70 (1981) (suggesting that students “simulate a reader’s response to their own writing”); see also Michael H. Graner, *Revision Workshops: An Alternative to Peer Editing Groups*, 76 ENG. J. 40, 42 (1987) (comparing peer editing to group discussions). Graner conducted a high school English class study in which he documented writing gains between students who received comments through peer edits (control group) and students who participated in teacher-led group discussions about sample essays and then edited their own work afterward (experimental group). *Id.* Even though the control group received feedback and the experimental group did not, both groups made nearly identical gains, underscoring the benefits of facilitating students’ self-editing skills. *Id.* at 42–43.

86. Harris, *supra* note 61, at 77; Rosen, *supra* note 62, at 65.

with errors, giving students opportunities to observe effective strategies for dealing with error.⁸⁷

The error analysts' teaching strategies reveal important secrets to their success. They take an up-front, educational approach to error, where students learn about common writing pitfalls before facing significant grade consequences. They adopt a teacher-as-coach model, where the teacher assumes a non-confrontational, suggestive stance toward error rather than a directive, punitive approach. And they promote reflective, observational learning, where teachers guide students but make them active participants in understanding and revising errors in their own work.

IV. APPLYING ERROR ANALYSIS TO LEGAL WRITING

This "new" approach toward error is ripe for application to 1Ls' analytical errors. Many attributes that support error analysis' application in the composition context also exist in the legal writing setting. For example, both composition and legal writing share common process-based pedagogies, predictable features from which departure produces "error," and students who are struggling to learn the language of a new discourse community. These attributes support an up-front, comprehensive, and enlightened use of student error as a means of improving 1Ls' writing and analysis.⁸⁸

87. Harris, *supra* note 61, at 77. Harris describes her modeling process for a student who struggled with choppy sentences:

I would demonstrate what I was describing by offering him a verbal protocol of what I was thinking as I wrote I would start writing and keep writing. In particular I stressed that I would plunge ahead and try to finish each sentence I wrote without planning the whole sentence beforehand. When I was done, we would reverse roles, and . . . he would try to copy the behavior he had observed. . . . My intent was to model a pattern of behavior for Mike to observe and try out and also to monitor his attempts by listening to his protocol and observing his actions. After three one-hour sessions Mike's writing improved noticeably.

Id. at 78; *see also* Rosen, *supra* note 62, at 65 (advocating a "write/model/apply" process in which "students receive numerous short lessons on grammar and mechanics plus the constant opportunity to apply these lessons to their own papers").

88. Though the higher-level analytical errors often seen in legal writing differ in kind from the more basic and arguably mechanical errors often seen in college composition, students in legal writing and composition courses and the disciplines themselves share important similarities that make error analysis viable in both contexts. *See infra* Parts IV.B–C (discussing why error analysis is well-suited for both composition and legal writing).

A. *Common Process-Based Pedagogies in Composition and Legal Writing*

Because of its heavy reliance on stages of writing and students' intellectual development, error analysis lends itself well to process-based writing approaches. Composition and legal writing professors are kindred souls in the school of process-oriented thought.⁸⁹ Like the composition professors before them, LRW professors have moved away from product-obsessed teaching.⁹⁰ Most LRW professors reject the sink-or-swim mentality that offers little direction and focuses primarily on form and technical correctness in a student's final submission. Instead, LRW professors focus on the process of legal reasoning, recognizing that good writing starts with sound thinking and evolves through guided learning during various stages of writing.⁹¹ LRW professors' orientation away from product, coupled with their interest in developing writing from thinking and their willingness to guide students during the writing process, frees LRW professors to adopt an up-front and comprehensive approach to analytical error. Just as error analysts diagnose and explore the reasons for grammatical and mechanical errors in their students' early work product,⁹² LRW professors can use conferences and early partial drafts not only as diagnostic tools to check for common 1L analytical missteps, but also to examine and redirect the thinking problems that produce those missteps during drafting stages.⁹³

LRW's process-oriented approach is also amenable to error analysis because it adopts a fundamentally student-centered "learning perspective" that can be applied directly to 1Ls' analytical errors.⁹⁴ LRW scholars have already urged professors in the field to reject the

89. See *supra* notes 20, 63-65 and accompanying text (discussing the use of process-oriented teaching methods).

90. Kearney & Beazley, *supra* note 21, at 888 ("Today . . . most writing teachers use the 'process' method of teaching writing."); Levy, *supra* note 18, at 12 (recognizing that while it is much easier to critique superficial "mechanical flaws," through comments like "use active voice" and "put page numbers here," legal writing professors must take on "the difficult task of identifying the underlying thinking problems").

91. Kearney & Beazley, *supra* note 21, at 888 (describing the "process-oriented" legal writing teaching method, where teachers "intervene in the students' work while they are in the process of composing" based on the theory that "people write better if they do not try to produce a finished draft at one sitting"); Levy, *supra* note 18, at 12 ("[O]nly a pedagogical approach that understand[s] the relationship between analytical and writing skills will have any real success at producing better writers."); Venter, *supra* note 25, at 623 (citing Teresa Goodwin Phelps, *The New Legal Rhetoric*, 40 Sw. L.J. 1089 (1986)).

92. See, e.g., Bartholomae, *supra* note 5, at 258 (equating error analysis to a "method of diagnosis").

93. For specific error analysis-inspired LRW teaching strategies, see *infra* Part VII.

94. Kroll & Schafer, *supra* note 5, at 243 (emphasis omitted).

“all-knowing” teacher role⁹⁵ and have cautioned against expecting technical perfection from students’ writing.⁹⁶ In dealing with error, LRW professors can don their coaching caps by studying their students’ error patterns and alerting them to common pitfalls early on. Then, they can provide classroom editing opportunities for students to discover and correct their own errors.⁹⁷ The ultimate goal is not to chastise students for their errors but to move students up the analytical learning curve.⁹⁸ Empowered by a deeper understanding of their analytical strengths and weaknesses—before submitting papers for grades—1Ls are less likely to see themselves as “victims of the writing process.”⁹⁹

B. Predictability in Composition and Legal Writing

The predictable features used to gauge students’ writing strengths and weaknesses represent another reason why both composition and legal writing are well-suited to error analysis. Error analysis thrives in rule-driven writing genres that contain predictable features and a “target form.”¹⁰⁰ In composition studies, predictable features include elements of writing such as proper verb forms (e.g., agreement with subject, appropriate tense), correct noun endings (e.g., plural and possessive), clarity in pronoun use, correct spelling, usage, and syntax.¹⁰¹ The “target form” combines these technically correct features along with

95. Kearney & Beazley, *supra* note 21, at 891-92 (advocating that LRW faculty allow students to “make decisions for themselves with only necessary guidance from the teacher”); Philip C. Kissam, *Thinking (By Writing) About Legal Writing*, 40 VAND. L. REV. 135, 168-69 (1987) (encouraging faculty to adopt the role of “coach” in working with students on early, non-graded drafts); Rideout & Ramsfield, *supra* note 10, at 66 (promoting the concept of the LRW professor as a guide for students).

96. See Kearney & Beazley, *supra* note 21, at 893 (noting that student writing suffers when students are required to focus on grammar and structure before having mastered substance); Soonpa, *supra* note 3, at 103 (suggesting that LRW professors refrain from commenting on every single type of error and instead devise a “hierarchy of error” with comments that take into account realistic audience reactions).

97. See the teaching strategies described *infra* Part VII. The strategies we propose supplement more traditional teaching methods discussed *supra* Part II.

98. See Kroll & Schafer, *supra* note 5, at 244 (“[T]he composition teacher as error-analyst investigates error (to discover how a student arrived at the mistake) and then applies these insights (to help the student move further toward the target form).”) (emphasis omitted).

99. Bartholomae, *supra* note 5, at 258; see *infra* Part VII (discussing the benefits of using student error in the classroom). In our experience using error in the classroom, students appreciated knowing that error is a necessary part of the writing process, and they found the inevitability of error in their own writing comforting, rather than overwhelming. Many students commented that the “teaching in reverse” class exercise, discussed *infra* Part VII, was one of the most instructive and memorable classes of the semester.

100. Kroll & Schafer, *supra* note 5, at 244.

101. See generally SHAUGHNESSY, *supra* note 15 (covering these common Basic Writing errors over several chapters).

transitions, rhythm, elegant variation, and other attributes of “good” writing to produce a coherent essay. Departures from the target form are quickly perceived as “errors” by the expert writing audience.¹⁰² For example, when a writer “breaks the rules of word order that govern the English language, he usually disturbs the reader at a deep level, forcing him to re-cast mentally the deviant sentence before he can proceed to the next one.”¹⁰³

Legal writing, as well, has predictable features and a “target form” from which departure causes consternation in legal audiences. One common target form in legal writing is the objective analytical memorandum that applies law to client facts to determine a likely answer to a legal question. Legal memoranda have core legal reasoning components that appear in predictable “intellectual locations.”¹⁰⁴ In these intellectual locations, law-trained readers find rules of law, explanations of precedent, and applications of law to fact.¹⁰⁵ There is considerable agreement among legal audiences, including professors, lawyers, and judges, that these legal reasoning components are central to effective legal writing.¹⁰⁶ Based on their experiences, scholars have

102. *Id.* at 90 (“[Errors] affect[ing] ordinary features of written English [] are easy to spot and, for English teachers, almost irresistible to correct.”); *see also* Connors & Lunsford, *supra* note 55, at 396 (“[V]ery few of us can deny that an outright comma splice, its/it’s error, or misspelled common word distracts us.”).

103. SHAUGHNESSY, *supra* note 15, at 90.

104. Mary Beth Beazley, *The Self-Graded Draft: Teaching Students to Revise Using Guided Self-Critique*, 3 LEGAL WRITING 175, 177 (1997) (coining the term “intellectual locations” to refer to legal writing analytical components such as “the articulation of a rule, the application of a rule to facts, or the conclusion to the discussion of a legal issue”).

105. As Beazley describes, courts expect lawyers’ arguments to incorporate “agreed-upon analytical elements.” *Id.* at 178. Specifically, she observes that:

when making a legal argument, it is expected that 1) the writer will articulate a rule for the court to apply, 2) the writer will cite to the best possible authority for that rule, 3) the writer will explain any ambiguities in the rule, usually by illustrating how the rule has been applied in the past, and 4) the writer will explain how the rule should be applied in the pending action.

Id.

106. *Id.* at 177–80; *see also* HUNTER M. BRELAND & FREDERICK M. HART, *DEFINING LEGAL WRITING: AN EMPIRICAL ANALYSIS OF THE LEGAL MEMORANDUM* 8 (1994) (reporting on a review of 237 sample student memoranda). In this 1994 Law School Admissions Council (“LSAC”) report, legal writing experts cited these components—articulated as “authority description,” “application of law to facts,” and “analogy and comparison of facts”—as key attributes distinguishing effective from ineffective memoranda. The report’s results were generated by LRW professors, humanities specialists (who focused on English composition elements), and legal consultants’ review of 237 sample student memoranda from twelve different law schools. First, LRW professors rated the samples on overall quality and provided detailed comments on each. *Id.* From these ratings and comments, the humanities specialists and legal writing consultants developed a taxonomy of legal writing elements, later refined by an Advisory Committee on Legal Writing (comprised of legal writing experts). *Id.* at 7, 9. Weaknesses in

reported that these components suffer from “recurring ‘patterns of error’” in novice legal writers’ work.¹⁰⁷

Error analysis provides a method for taking the predictable nature of legal analysis—and students’ departures from its core components—and showing students the acceptable bounds of legal writing. Employing the teaching techniques of error analysts, LRW professors can contrast a variety of errors on specific core legal reasoning components with effective analysis on those core components early in the learning process.¹⁰⁸ This helps 1Ls understand more than how their analysis can go right, or how it can go wrong. It also helps 1Ls distinguish effective from ineffective analysis in general and acquire their own sense of where (and whether) their analysis falls on the continuum of acceptable legal analysis.

C. Composition Writers and Legal Writers’ Common Challenges

Error analysis is particularly useful in helping groups of novice writers acclimate to a new discourse community. In this respect, 1Ls stand on common ground with students in many sub-fields of composition because they are at “points of transition,” characterized by writing scholar Joseph Williams as movements from “high school to college, from the general education of freshman composition to some academic concentration, from college to graduate or professional school, from professional school to a profession.”¹⁰⁹ For example, students in Basic Writing programs are young adults who have been exposed to language from a young age, but who are transitioning to college—without the benefit of meeting traditional admissions standards.¹¹⁰ Basic Writers do not need to “learn to use language” but must “learn to command . . . a particular variety of language use—writing itself.”¹¹¹ In their efforts to master new discourse conventions,

these components led the experts to evaluate student writing unfavorably. *Id.* Separately, a nationwide survey of attorneys, state and federal judges, and legal writing teachers revealed a consensus view that the most important elements of legal analysis in legal memoranda are “effectively weaving the entire body of authority into an argument to give the reader a clear understanding of the applicable body of law,” followed by “rules set out before facts.” Susan Hanely Kosse & David T. ButleRitchie, *How Judges, Practitioners, and Legal Writing Teachers Assess the Writing Skills of New Law Graduates: A Comparative Study*, 53 J. LEGAL EDUC. 80, 89 (2003).

107. Kristen K. Robbins, *Paradigm Lost: Recapturing Classical Rhetoric to Validate Legal Reasoning*, 27 VT. L. REV. 483, 498 (2003).

108. See the specific teaching strategies discussed *infra* Part VII.

109. Williams, *supra* note 10, at 1.

110. Bartholomae, *supra* note 5, at 254.

111. *Id.*

Basic Writers “get[] in over their heads”¹¹² and struggle at predictable trouble spots. Basic Writers often follow their own set of faulty and “approximate” but rational and intentional systems that are simply “intermediate” steps on the path toward learning the target form.¹¹³

Even those freshmen whose skills are well beyond those of Basic Writers and who have had success with writing in high school are likely to exhibit deteriorated writing skills when they transition to college.¹¹⁴ In particular, many college students revert back to—or continue to produce—“writer-based prose,” text that “fails to fulfill [the audience’s] needs” but “does have an inner logic of its own.”¹¹⁵ Writer-based prose neglects the writing audience and discourse community, reciting primarily what the writer knows rather than what the reader needs to hear.¹¹⁶ Nonetheless, this prose is a “functional system” rather than a set of “random errors” because it represents the writer’s efforts to master complex information without the additional burden of having to accommodate audience needs.¹¹⁷

Similar struggles to approximate the target forms of a new discourse community and to reach their reading audiences are familiar to LRW professors. Novice law students stand at a point of major transition from other academic and professional settings to the unique world and discourse of law. When teaching 1Ls, typically an intelligent, motivated group with previous writing experience, LRW professors emphasize that learning to “think like a lawyer” is akin to mastering a new language.¹¹⁸ At the very least, LRW professors understand that

112. *Id.*

113. *Id.*

114. Williams, *supra* note 10, at 2, 15 (“[T]hese points of major academic or professional transition are predictably the period when a person’s writing and apparent thinking may seem especially bad . . . [in part because] the cognitive burden is too great for many students to maintain once-mastered skills at earlier levels.”).

115. Flower, *supra* note 51, at 25.

116. *Id.* at 26.

117. *Id.* at 26, 27; Sharon Crowley, *Components of the Composing Process*, 28 C. COMPOSITION & COMM. 166, 167 (1977) (describing freshman writers’ failure to synthesize information for the reader and their tendency to view the ultimate audience as the English teacher rather than a real-world reader).

118. Williams, *supra* note 10, at 10. Williams explains why 1Ls—even those who were successful writers in other disciplines—often seem to regress in writing and analytical ability during the first year of law school. One problem, he contends, is that it is difficult to learn “good critical thinking” as a “generic skill” because:

(1) what counts as the rules of good thinking differs from field to field, and (2) what different fields count as good evidence also differs from field to field What counts as good thinking in a literary analysis of Iago’s criminal behavior in *Othello* would not count as good thinking in the analysis of alleged criminal behavior in a court room, and vice versa.

new law students are beginners at legal discourse and its unfamiliar target forms of communication. As law students put into practice what they have been taught about legal reasoning, communicating an analysis in writing, and conforming to the law-trained reader's expectations, they too "get in over their heads" and encounter thinking missteps.¹¹⁹ Faced with an astounding array of foreign modes of thinking, law students often adopt flawed—but rational and rule-bound—strategies for communicating their analysis.¹²⁰ Similar to freshman composition writers who produce writer-based prose that ignores audience needs as a means of coping with cognitive complexity, 1Ls may write about complex bodies of information by explaining "self-evident banalities," summarizing rather than synthesizing for their audience, and writing "degenerated" prose "under the pressure of cognitive overload."¹²¹

Through error analysis, legal writing professors can make sense of this seeming "chaos of error." We can begin to identify and even predict the "idiosyncratic strategies" that law students adopt at various stages of their development process.¹²² Equipped with this knowledge, we can help students to minimize the intensity and frequency of their errors as they climb the analytical learning curve.

V. OUR EXPERIENCE WITH COMMON 1L ANALYTICAL ERRORS

The remarkable similarities in rationale for using error analysis in the composition context, as well as the tantalizing possibilities for learning more about why first year law students "do what they do," drove us to conduct an error analysis of our own 1Ls' legal memoranda. We too suspected that our 1Ls' legal memoranda would produce a stable of

Id.

119. *Id.* at 14 (listing some of 1Ls' steepest challenges as the need to master the "current state of [legal] knowledge and the history of how that knowledge came about," "new ways of thinking that may conflict with ways of thinking to which we have already habituated ourselves," and the need to "find the voice of the community . . . [which is] a difficult matter").

120. See *id.* at 18 (detailing the characteristics of three strategies formed by novice writers). Williams' overall thesis is that cognitive overload associated with learning the conventions of a new discourse community accounts for much of the difficulty that law students have with learning legal writing. *Id.* at 14–15. He argues that these socialization issues, rather than "generic incompetence or inadequate preparation," *id.* at 16, produce predictable flaws in students' legal writing, and that the key to improving students' writing is making students "self-aware of their own behavior." *Id.* at 31. Williams stops short, though, of advocating specific pedagogies for increasing students' self-awareness and for improving their analysis.

121. *Id.* at 18–22. For an explanation of how 1Ls' socialization challenges intersect with specific analytical errors, see *infra* Part VI.

122. See Bartholomae, *supra* note 5, at 256 (finding that ultimately, we may be able to use students' error patterns over time to define necessary stages of law students' development in legal discourse).

predictable common errors—errors whose “thinking” origins we could investigate and redirect in more productive ways.

The remaining sections of this article present the results of and recommendations from our own error analysis, mirroring the three-part strategy used by error analysts in the field of composition.¹²³ We begin by explaining common analytical error patterns that we documented in our own students’ work at a relatively early stage in their transition to law school. We next study learning theories from the fields of educational psychology and composition to investigate, at least theoretically, *why* our students might be making these errors so frequently at this stage of their analytical development. Next, we recommend specific teaching methods that acknowledge the developmental role of common errors, aim to improve students’ self-editing skills, and aim to minimize the frequency or intensity of errors at an earlier stage.

A. *The Purpose of Our Study*

We studied our students’ errors to identify common weaknesses that we could reveal early in the teaching process to give our students a more up-front, concrete, and personal understanding of how their work might fall outside the bounds of acceptable legal discourse. Our goal was not to establish a definitive set of errors that all legal writing professors are most likely to see, but instead to gain a deeper appreciation for the skills our students struggled with most often rather than relying on anecdotal or generalized information in articles and legal writing textbooks.

To conduct this study, we reviewed our most accessible and familiar source of student error—our comments on the students’ memorandum assignments. We created a chart to record different categories of errors we found in their assignments and tallied the number of times our students made various errors in these categories. As we suspected, our study revealed groups of identifiable errors that appeared in paper after paper, year after year.

123. See *supra* Part III.C (discussing the tripartite strategy of: (1) educating students about prevalent errors at specific stages through tracking changes in the students’ work, (2) focusing on students’ cognitive missteps as a result of their efforts to approximate new forms of discourse, and (3) reassuring students that errors are a part of the writing process, while helping them move past these errors).

B. Methodology

In conducting our error analysis, we sought to identify how often certain errors occurred across students and across different memorandum assignments. First, we selected a sample of memoranda that covered core analytical skills taught to the students early in the fall semester. Specifically, we reviewed our comments on closed-universe memorandum assignments¹²⁴ written in the fall semesters of 2002, 2003, 2004, and 2005.¹²⁵ The students worked on the closed-universe memorandum assignments after several weeks of practicing legal analysis through the Socratic Method in other classes, LRW class exercises, and short, ungraded LRW analytical assignments, but before students learned legal research. As a result, we believed that our comments on these memoranda would isolate students' analytical errors, rather than errors in finding and choosing authorities. Furthermore, the students rewrote the closed-universe memoranda, providing us with two sets of professor comments per assignment.¹²⁶ By charting errors the students repeated in the re-write, we were better able to identify the intractable errors that stayed with the students as they developed their legal reasoning and analytical skills.

Second, we created a list of errors that we expected to find in our students' memoranda and that we could readily identify from our textual comments on the students' analytical strengths and weaknesses.¹²⁷ We compiled this list of errors by examining the core analytical skills that students must exhibit in a typical law-to-fact application assignment such as the closed-universe memorandum.¹²⁸

124. The "closed-universe" memorandum assignments provide the students with the governing authority (e.g. a statute and/or several cases) and require the students to apply the legal authority to a set of client facts. Our closed-universe memorandum topics vary among professors and change from year to year.

125. The sample consisted of memoranda written by 148 students over the four-year period under study.

126. In one assignment, we reviewed only one set of comments because the students' first drafts did not contain a full discussion section.

127. Our methodology parallels the methodology used in the LSAC report. As explained in *supra* Part IV, the LSAC report examines legal writing through objective memoranda written by first-semester 1Ls at twelve different law schools. BRELAND & HART, *supra* note 106, at 1. In the LSAC report, two independent legal consultants were hired to develop a taxonomy of legal writing by examining the comments professors gave the students in grading their memoranda. This initial taxonomy was revised by Educational Testing Service ("ETS") specialists who read the memoranda and comments with a specific focus on English composition. The final taxonomy represented the factors contributing to good legal writing. *Id.* at 7–10, app. B.

128. See, e.g., CHARLES R. CALLEROS, *LEGAL METHOD AND WRITING* (4th ed. 2002); RICHARD K. NEUMANN, *LEGAL REASONING AND LEGAL WRITING: STRUCTURE, STRATEGY AND STYLE* (5th ed. 2005); HELENE SHAPO ET AL., *WRITING AND ANALYSIS IN THE LAW* (4th ed.

From this list, we created an “error chart”¹²⁹ designed to document students’ performance on core analytical skills.¹³⁰ In the first column, we listed the categories of core analytical skills displayed in an objective memorandum: rule synthesis, case explanations, and applications of the rules to client facts.¹³¹ In each analytical skill category we created subcategories of errors.¹³² We labeled each subcategory of error a “struggle” and assigned each struggle a number. In the remaining columns, we indicated a range of student performance on each struggle—the second, third, and fourth columns were labeled “performed well,” “struggled,” and “failed,” respectively. We created a separate error chart for each closed-universe memorandum assignment.¹³³

Third, we reviewed the comments, charting the students’ performance on each skill category, calculating the frequency of their errors in each skill category, and modifying or adding to error subcategories to accommodate the full range of our comments. We assigned each memorandum a number, which we used to record the students’ performance in each analytical category. We read the textual comments of each student’s memorandum and coded the errors by documenting how often we encountered an “instance” in which the student performed an analytical skill well, struggled, or failed.¹³⁴ After

2003) (identifying core analytical memorandum elements). The LSAC taxonomy identified many of the same elements of a memorandum included in our list of expected skills and errors. BRELAND & HART, *supra* note 106, at 18, 36.

129. See Appendix A (listing an “error chart” of student strengths and weaknesses).

130. As explained in *supra* Part IV, these are components that appear in predictable “intellectual locations” in legal memoranda. They form the basis for our teaching and figure prominently in judicial opinions, in lawyers’ writing, and in legal method and writing texts. See Kosse & ButleRitchie, *supra* note 106, at 89 (ranking the most important aspects of each element of legal memoranda).

131. Rideout & Ramsfield, *supra* note 10, at 55. Ramsfield argues that students must construct the law by synthesizing rules, describing the existing law, applying legal rules, drawing analogies and distinctions, and developing legal arguments; BRELAND & HART, *supra* note 106, at 34 (identifying application of law to facts, the use of key facts, support for statements, and completeness of explanation as the most important factors determining overall quality of the memoranda).

132. See Beazley, *supra* note 104 (detailing self-editing exercises that legal writers can use “to identify strengths, weaknesses, and omissions in their writing”); BRELAND & HART, *supra* note 106, at app. B (listing a taxonomy of the elements of the legal memorandum as determined from instructor commentary).

133. Thank you to research assistant Lei Shen for her work in completing error charts for each of the six memorandum assignments.

134. To document an “instance,” we recorded the number assigned to the student’s memorandum in the appropriate performance column. If the comments indicated that the student did not struggle, we recorded the number in the second “performed well” column. If the student struggled, we recorded the number in the third “struggle” column. If the struggle appeared only

we completed all of the charts, the performance “instances” were tallied and a pattern of common analytical errors emerged.

We recognize that our methodological decisions and the variation in student performance on each assignment limit the applications of our research in some ways. We evaluated comments on 265 closed-universe memoranda written by students on six different topics for two different professors.¹³⁵ The shifting subject matter and difference in our teaching styles may have affected the errors’ consistency. Although we tied the subcategories of error in our “error chart” to core analytical skills, the selected “struggles” may be an incomplete list of our 1Ls’ analytical errors and they may reflect the biases we bring to the evaluation of our students’ memoranda.¹³⁶ Further, while our comments are the most accessible source of student error, translating the comments into patterns of analytical errors depends on consistency, clarity, and accuracy in commenting, which we may not have achieved in every assignment. For example, we did not mark every error every time it appeared in any given student memorandum, nor did we establish a strict standard for how many times we commented on any given error in a student’s memorandum.¹³⁷ In addition, the error coding may have been affected by an inaccurate understanding of a comment or an inability to isolate a single error from a comment addressing multiple analytical weaknesses.¹³⁸ Therefore, the frequency of the error per

once in the memorandum we drew a circle around the number, and if the struggle appeared multiple times throughout the memorandum, we drew a square around the number. Lastly, if the student failed to incorporate the analytical component in his or her memorandum, we recorded the number in the “failure” column.

135. The small sample size potentially resulted in a skewed set of analytical errors particular to our classes rather than legal writing faculty at large. Also, because our research focused only on students at our school, our research does not account for the difference in students’ skill levels at different legal institutions. Contrast the LSAC report, BRELAND & HART, *supra* note 106, in which twenty memoranda assignments ranging in quality from twelve different law schools were analyzed.

136. Despite our potential biases, the error categories we chose for our study closely track the elements of good legal writing identified by the independent legal consultants in the LSAC report. *Id.* at app. B.

137. When commenting on students’ papers, we aim to give the students a sense of what errors exist in their memoranda and to encourage the students to identify other instances of the same or similar errors in their writing. Therefore, we often identify a particular error only once or twice in the memorandum and expect the student to identify like instances of error in the remainder of the document.

138. Legal writing students face many challenges in drafting their assignments, and therefore a comment may not address all of the students’ struggles on a particular task. In addition to understanding the assignment’s legal issues, the students must also exhibit effective written communication. Writers who ignore concerns of style, grammar, and mechanics do not effectively communicate their ideas, and therefore their writing may not reflect their full understanding of the legal issues or mastery of analytical skills. See Kearney & Beazley, *supra*

student and across students and sections may not fully reflect how often the error appeared.

C. Sample Memorandum Fact Pattern

To illustrate the results of our study, we use examples of the most common errors found in students' writing on a closed memorandum assignment about intentional infliction of emotional distress (IIED) under Florida law. In the fact pattern, a cheerleader, Cady Heron, sues her coach, Regina George, for IIED when George subjects Heron to physically demanding training exercises and publicly reprimands and humiliates Heron. Heron is especially upset by a training drill in which George circles areas of fat on Heron's body every time she tumbles out of bounds. The students, representing Heron, must read four Florida cases and one Louisiana case and then analyze only one element of IIED: whether Heron is likely to prove that George's conduct is extreme and outrageous. Sample errors from this memorandum assignment accompany the next section explaining the results of our study.

D. Results

The results of our research demonstrate that our 1Ls' writing produces groups of identifiable and predictable analytical errors.¹³⁹ First, the students struggled to articulate rules from the case law that govern and define a legal element. Specifically, 19.25% of our students struggled to state a clear and concrete rule of law that would be comprehensible to the unfamiliar reader. Another 32.83% of our students struggled to develop a rule section without stating repetitive rules that were circular or that merely repeated the first rule in different words. Lastly, 34.34% of our students stated rules of law that were too narrow, representing an incomplete synthesis of the case law.

note 21, at 892 (arguing that students should focus "on substance alone during the early stages of the writing process," and then address stylistic and grammatical concerns). The lack of a consistent vocabulary in critiquing "legal writing" may also affect our study's results. See Terrill Pollman, *Building a Tower of Babel or Building a Discipline? Talking About Legal Writing*, 85 MARQ. L. REV. 887, 889-90 (2002) (arguing that legal writing professionals "have not yet established a uniform common vocabulary within the legal writing academy," and that "[e]ven within one program, the variation in terminology can be substantial").

139. The textual discussion focuses on the errors most commonly identified in both the original and the re-write of the memorandum assignments. The percentages were calculated by counting the total number of memoranda that contained each error, regardless of whether the error appeared in a single instance or in multiple instances. To view the full results of our study, see Appendix B.

Examples of Rule Synthesis Error

<i>Student</i>	<i>Type of Error</i>	<i>Example of Error</i>
Student A	Failure to state a clear and concrete rule of law comprehensible to the unfamiliar reader	<p>Student's Rule Statement: Conduct may be extreme and outrageous when the actor knows about the other's sensitivities and proceeds. <i>Korbin</i>.</p> <p>Explanation of Error: This rule does not explain when the act of "proceeding" rises to the level of extreme and outrageous conduct for IIED. This rule also fails to connect the actor's knowledge about the plaintiff to the actor's behavior, leaving unclear that the actor must not only know about the plaintiff's sensitivities but must also exploit this knowledge in a manner calculated to cause distress to the plaintiff.</p>
Student B	Repetitive rules	<p>Student's Rule Statement: For the conduct to be extreme and outrageous, it must exceed all bounds tolerated by society. Outrageous conduct is so extreme in degree that it is regarded as utterly intolerable in a civilized community. <i>Met. Life Ins. Co.</i></p> <p>Explanation of Error: This student fails to use the second sentence to define the bounds of decency tolerated by society; the student merely repeats the first sentence's rule in different words. The student should have developed the rule in the second sentence, explaining to the reader that mere insults, indignities, threats, annoyances, and petty oppressions are within the bounds of conduct tolerated by society.</p>
Student C	Rule stated too narrowly (incomplete synthesis of the rule)	<p>Student's Rule Statement: A defendant's conduct is extreme and outrageous when the defendant abuses his authority by convincing the plaintiff to voluntarily give up his legal rights. <i>Dominguez</i>.</p> <p>Explanation of Error: This rule is too case-specific, lacking the generalization that provides predictive value for future cases. A defendant need not always convince the plaintiff to give up a legal right in order to have abused a position of authority or power over the plaintiff.</p>

Second, our research shows that an overwhelming number of students struggled to illustrate the rule as courts applied it in the precedent. Specifically, 62.26% of the students omitted the court's reasoning so

that the reader had to figure out why the court reached its decision under the rule. Another 52.83% of the students stated the reasoning but left out any context of the precedent facts or holding. Lastly, 47.55% of the students explained parts of the case that had no relationship to the rule development or application to the client facts.

Examples of Explanation Error

<i>Student</i>	<i>Type of Error</i>	<i>Example of Error</i>
Student D	Omission of court's reasoning	<p>Student's Explanation: In <i>Dominguez</i>, the plaintiff, who was receiving disability income under his insurance policy after a car accident left him disabled, stopped receiving payments. An agent of the insurer falsely represented to the plaintiff that the insurance company had received a letter from the plaintiff's doctor stating that plaintiff was no longer disabled and thus no longer covered by the policy. The court concluded that the conduct of the insurance company was extreme and outrageous.</p> <p>Explanation of Error: This student fails to explain why the court held as it did. In <i>Dominguez</i>, the court reasoned that the insurance agent's conduct was extreme and outrageous because the agent had violated the company's fiduciary duty to the insured and unjustly abused a position of power over the disabled plaintiff. Without the explanation of the court's reasoning, the student is unable to make the abstract comparison between violation of the duties owed by the insurance company to the insured and the potential violation of the duties owed by George, a cheerleading coach, to Heron, a member of her squad.</p>
Student E	Reasoning stated without context of precedent facts or holding	<p>Student's Explanation: In <i>White v. Monsanto</i>, the court reasoned that the "plaintiff's status as an employee may entitle him to a greater degree of protection from insult and outrage by a supervisor" because of the supervisor's position of authority and power to affect the employee's interests.</p> <p>Explanation of Error: This student accurately states the court's reasoning but leaves out any explanation of the facts or holding. In fact, this explanation is mere dicta, as the court held that the supervisor's conduct was not extreme</p>

Student E, cont'd.	and outrageous because the supervisor had the right to discipline his employees, even if with harsh or profane words. The student also omits material facts supporting this holding: the supervisor subjected three employees to a brief, yet profane, tirade when disciplining them for sitting around idly during the workday.
Student F Explaining parts of the case that are irrelevant to the rule	<p>Student's Explanation: In <i>White v. Monsanto</i>, the plaintiff, a church-going woman in her late forties, was upset by the supervisor's tirade and began to experience pain in her chest, pounding in her head, and difficulty breathing. The court stated that disciplinary action is a legal right in a workplace environment and conflict in a pressure-packed workplace environment, although calculated to cause some degree of mental anguish, is not ordinarily actionable.</p> <p>Explanation of Error: This student focuses on the wrong set of facts to explain that conduct that might otherwise be extreme and outrageous may be privileged where the actor has done no more than exercise his legal right in a permissible way. Rather than explaining why the supervisor's tirade was an acceptable form of discipline, the writer focuses on the sensitivities of the plaintiff, which are relevant to a different rule analyzed earlier in the memorandum.</p>

Third, the students struggled to apply the rules and the case law to the client facts through analogy and distinction. Specifically, 60.75% of our students drew incomplete comparisons of the precedent facts to the client facts. Another 69.06% of our students simply listed the facts of the case and required the reader to perform the analytical work.

Examples of Application Error

<i>Student</i>	<i>Type of Error</i>	<i>Example of Error</i>
Student G	Incomplete comparison of the precedent facts to the client facts	<p>Student's Application: This case parallels <i>Korbin</i>. George knew that young women are generally sensitive to criticisms of their appearances, especially in the presence of others. Furthermore, George was likely aware of Heron's drastic twenty pound weight loss, and therefore subjecting Heron to a fat-circling exercise was extreme and outrageous.</p> <p>Explanation of Error: From this passage, the</p>

Student G, cont'd.	reader cannot tell what rule of law is being applied or why these facts matter in determining the extreme and outrageous nature of George's conduct. The student fails to show, by explicit comparison of the client facts to the precedent facts, that the defendant's knowledge of the plaintiff's sensitivities may make the defendant's conduct, even if otherwise acceptable, extreme and outrageous when directed at the plaintiff.
Student H Failure to perform the analytical work for the reader	Student's Application: Distinct from the supervisor in <i>White</i> , the fat-circling incident was part of a pattern of repeated harassment. Explanation of Error: This student fails to make direct and fact-specific linkages between the precedent facts and the client facts necessary to prove that George's conduct was extreme and outrageous. Furthermore, the student compares apples to oranges; the writer needs to compare the fat-circling incident to the supervisor's tirade in <i>White</i> , not to the supervisor himself. The writer also fails to examine why the pattern of harassment is relevant; the <i>White</i> court implies that a pattern of harassment is necessary for a supervisor's behavior to be extreme and outrageous.

E. Moving Beyond the Numbers

Our study supports at least two observations. The first may seem disheartening: despite our best teaching efforts and pedagogical improvements, fledgling law students make the same kinds of basic analytical errors each year. Indeed, many students continue to make the same errors on re-writes after digesting professor comments and attending one-on-one conferences.¹⁴⁰ But the second observation is promising: early in the learning process, law students' analytical errors are not only predictable, they can be charted, quantified, and, most importantly, investigated for potential root causes.¹⁴¹ Simply a "natural

140. This is not surprising in light of the scholarship on teacher commentary, which indicates that comments, even when combined with individual conferences, are not as effective at improving writing as many teachers may believe. *See supra* notes 31–33 and accompanying text (detailing student difficulties in responding to professor comments).

141. Although we may not have created a taxonomy of error universal to all law students, the results of our study strongly indicate that a core set of predictable errors does exist and that some errors have staying power from the initial draft of an assignment to the re-write of the assignment. *See generally* Robbins, *supra* note 107; Williams, *supra* note 10 (cataloguing anecdotally

part of learning a language,”¹⁴² these common errors should be hailed for what they tell us about our students’ learning and our teaching.

VI. LEARNING AND COMPOSITION THEORY PRINCIPLES: STARTING POINTS FOR INVESTIGATING THE SOURCES OF 1L ANALYTICAL ERRORS

The next step in our error analysis is to investigate the missteps in student thinking that may have produced these analytical errors.¹⁴³ Rational starting points for this inquiry are the learning and composition theories that scholars have used to explain many of the thinking challenges that confront law students as they learn legal analysis.¹⁴⁴ Three of these theories hold special promise for investigating the reasons behind common 1L analytical errors: (1) the “transfer of learning” theory (also called “transfer theory”),¹⁴⁵ (2) social constructivism, a composition theory,¹⁴⁶ and (3) theories on expert and novice approaches to reading and writing.¹⁴⁷

predictable faults in law students’ legal writing).

142. Kroll & Schafer, *supra* note 5, at 243. Many students who enter a new discourse community experience a “brief period of seeming incompetence” as they adjust to the expectations and behaviors of members of this community. Williams, *supra* note 10, at 2, 15.

143. Bartholomae, *supra* note 5, at 265. Bartholomae states that:

Error analysis, then, involves more than just making lists of the errors in a student essay and looking for patterns to emerge. It begins with the double perspective of text and reconstructed text and seeks to explain the difference between the two on the basis of whatever can be inferred about the meaning of the text and the process of creating it.

Id.

144. See generally DeJarnatt, *supra* note 11 (suggesting methods to bring students into the discourse of the community of law); Pamela Lysaght & Christina D. Lockwood, *Writing-Across-the-Law-School-Curriculum: Theoretical Justifications, Curricular Implications*, 2 J. ASS’N LEGAL WRITING DIRECTORS 73 (2004) (discussing well known legal writing theories and synthesizing common themes); Parker, *supra* note 4 (discussing educational goals served by various teaching methods and curriculum); Soonpa, *supra* note 3 (arguing that research on “composition and writing theory from English scholars . . . provide[s] perspective and understanding for those teaching legal writing”). Our error analysis did not include a survey of the reasons why our students believe they made the mistakes we documented in their memoranda. Therefore, this section focuses on the learning theories that most likely explain the errors we discovered in our students’ analyses.

145. See, e.g., Oates, *supra* note 3, at 1 (discussing utilizing knowledge and skill accrued in one area in alternate disciplines).

146. See, e.g., Soonpa, *supra* note 3, at 87–88 (stating that writing is a unique mode of learning that employs inactive, iconic, and symbolic modes of actuality).

147. See, e.g., Berger, *supra* note 21, at 170–84 (1999) (detailing that expert legal writers pay closer attention to context than novices, read more flexibly and efficiently, and frequently use specific reading strategies); Dorothy Deegan, *Exploring Individual Differences Among Novices Reading in a Specific Domain: The Case of Law*, 30 READING RES. Q. 154, 162–68 (1995) (suggesting that the ability to analogize parts of legal text that are initially problematic is a likely indicator of academic success).

A. *Transfer Theory: Underlying Structures and Levels of Abstraction*

Rooted in educational psychology, the essence of transfer theory is that people have difficulty applying established skill sets to new and unfamiliar problems.¹⁴⁸ Novice law students' transfer difficulties take many forms. For example, 1Ls may not apply what they have learned about researching a statutory wrongful discharge question in one state to a statutory trade secret question in another state.¹⁴⁹ Even if students know that both are state law statutory issues, they may not transfer what they have learned about the value of annotated statutory compilations between jurisdictions and subject matters. Similarly, law students may not readily apply information acquired in a legal writing class to a clinical course or to an exam. For many students, it is not until the second semester of law school that they realize the core components of legal reasoning run through the first-year curriculum, or that they comprehend that they are learning inductively in doctrinal classes the same skills that they are learning deductively in legal writing.

Two transfer problems loom especially large in 1Ls' analytical work. Most universal is the tendency of law students to represent legal questions in terms of their surface features (such as specific facts) rather than their underlying analytical structures (such as legal claims or rules of law).¹⁵⁰ A second transfer problem that law students face is

148. Oates, *supra* note 3, at 1 (citing Mary L. Gick & Keith J. Holyoak, *Analogical Problem Solving*, 12 COGNITIVE PSYCHOL. 306, 349 (1980)); Nancy Penington et al., *Transfer of Training Between Cognitive Subskills: Is Knowledge Use Specific?*, 28 COGNITIVE PSYCHOL. 175 (1995) (noting that college students cannot always see how learning in one class applies to another, and employees often fail to see how they can apply academic lessons to workplace tasks); *see also* Williams, *supra* note 10, at 15 (noting when novices attempt to learn new skills, they often forget skills or knowledge they seem to have mastered at an earlier time). One author's study of college student writing across the curriculum poignantly illustrates a student's struggles with transfer-of-learning as he shifted classroom writing environments:

As I followed Dave from one classroom writing situation to another, I came to see him, as he made his journey from one discipline to another, as a stranger in strange lands. In each new class Dave believed that the writing he was doing was totally unlike anything he had ever done before. This metaphor of a newcomer in a foreign country proved to be a powerful way of looking at Dave's behaviors as he worked to use the new languages in unfamiliar academic territories.

Lucille Parkinson McCarthy, *Stranger in Strange Lands: A College Student Writing Across the Curriculum*, 21 RESEARCH IN THE TEACHING OF ENGLISH 233, 234 (1987).

149. *See* Oates, *supra* note 3, at 7–8 (advocating that statutory research instruction should cover several examples with different facts and legal issues and emphasize that each is based on a common research approach). Oates and co-author Anne Enquist have penned an entire research text founded on transfer-of-learning concepts. *See* LAUREL CURRIE OATES & ANNE ENQUIST, JUST RESEARCH (2005) (detailing these various concepts).

150. Oates, *supra* note 3, at 4; Williams, *supra* note 10, at 11 (explaining that novice problem-solvers focus on the components of the problem that are most concrete and most visible). An anecdotal case in point is a 1L's efforts to research a memorandum assignment on the tort of

difficulty working with levels of abstraction to solve a legal problem.¹⁵¹ Because 1Ls do not always see how facially different facts can be categorized more abstractly to forge compelling analogies, they often miss connections between the legal problem they are researching and the case law.¹⁵²

B. Social Constructivism Theory: Adjusting to a New Discourse Community

1Ls must not only clear the transfer hurdles to sound analytical thinking but they must also grapple with socialization into the legal discourse community.¹⁵³ According to social constructivism, a composition theory that enjoys broad support in the legal writing field,¹⁵⁴ writing is primarily a social act and can be understood only in the context of the writer's discourse community.¹⁵⁵ Therefore, to be a

bystander negligent infliction of emotional distress. The memorandum assignment was created by Brannon Heath, Associate Professor of Legal Process at Touro College's Jacob D. Fuchsberg Law Center. The client in the problem was a woman suing a boat tour company that sponsored a shark-feeding excursion that resulted in her fiancé's fatal death by shark attack. The woman had been on the boat and claimed to have seen and heard enough of the attack to suffer severe emotional distress. Because the student first focused on the assignment's surface features, his research was off track from the beginning. Working primarily with the facts, the student researched largely irrelevant shark attack cases. He bypassed cases with different facts—a husband who sees his wife's car accident through a sound-proof window, for example—but with the shared analytical feature of a bystander's traumatic sensory experience. For another example of students' difficulty moving beyond surface features to underlying analytical structures, see Oates, *supra* note 3, at n.21.

151. See Oates, *supra* note 3, at 5 (describing novices' challenges with levels of abstraction); see also Williams, *supra* note 10, at 3–8 (noting that novice law students often lack the ability to think critically, imaginatively, or flexibly about the law).

152. For example, a student researching the tort of intentional infliction of emotional distress may not see the link between a television reporter who, in a prime time newscast, questions a young child relentlessly about her just-deceased friend, and a reality television producer who generates high ratings by exploiting a fragile cast member's traumatic grade school memories. While a trained legal analyst may recognize that the reporter and the producer have both engaged in "extreme and outrageous" conduct that takes advantage of a plaintiff's "special susceptibility," the student may not see these common features in these actors' behavior.

153. See *supra* Part IV.C for a discussion of composition and law students' comparable struggles to write within new discourse communities at points of academic transition.

154. See sources cited in Berger, *supra* note 21, at 168 n.88 (stating that the logical extension of social construction may be that legal writing is best learned in the law office); Lysaght & Lockwood, *supra* note 144, at 99 (stating that LRW professors are increasingly incorporating more social context into their courses); Parker, *supra* note 4, at 566–67 (likening learning the discipline of legal writing to entering a "new community of discourse").

155. Soonpa, *supra* note 3, at 87 (describing the theory of social constructivism in the field of composition); Berger, *supra* note 21, at 158 (noting that under the theory of social constructivism, "thinking and language use can never occur free of a social context that conditions them") (internal citation omitted); Williams, *supra* note 10, at 9 ("Good thinking and good writing are not the natural outcome of natural growth but rather a set of skills that can be deliberately taught

successful writer, a student must learn the community's language and conventions.¹⁵⁶

But learning the conventions of legal analysis presents a stiff challenge to 1Ls. Written legal analysis is a highly specialized form of communication, heavily reliant on organization, reasoning, and high levels of precision.¹⁵⁷ Pre-law training rarely emphasizes the structure and logic that are native to legal analysis.¹⁵⁸ Even if 1Ls' previous education or experience has trained them to write in a structural, analytical manner, they are unfamiliar with the components of legal reasoning that inhabit that structure. Many 1Ls also have not been schooled in the kinds of intensive thinking, outlining, and rewriting processes necessary to produce clear, accurate legal analysis.¹⁵⁹

Written legal analysis is also tremendously focused on audience needs. But 1Ls cannot easily discern the needs of law-trained readers and the environment in which these readers operate.¹⁶⁰ Judges and lawyers are harried professionals who are reading legal analysis because they have a problem or dispute to resolve, not because they are interested in the writer's intellect or subject mastery, as the students' undergraduate or graduate professors might have been.¹⁶¹ Judges and

and deliberately learned in a context that we can describe as a 'community of knowledge' or a 'community of discourse.'").

156. Soonpa, *supra* note 3, at 87 ("Only when writers understand a new discourse community, such as the academic or professional discourse community, can they set operational goals that will allow them to meet the conventions of that new kind of writing."). To write effectively within the legal discourse community, law students must "provide a succinct but complete analysis of a legal issue to someone else. That analysis is usually provided to a skeptical audience, trained to look for flaws, who must be persuaded that the analysis is accurate and valuable." DeJarnatt, *supra* note 11, at 510.

157. See LINDA H. EDWARDS, *LEGAL WRITING AND ANALYSIS* 69 (2005) (explaining that "lawyers and judges live in a legal community that shares certain values, customs, and forms of expression" and emphasizing that effective legal writing depends on understanding them); Williams, *supra* note 10, at 10 ("[All LRW professors] have had to teach new habits of thinking to counter the habits of everyday thinking that students bring with them from their undergraduate training in literature, philosophy, history, chemistry, sociology, etc.").

158. Soonpa, *supra* note 3, at 88 (explaining that law students' previous writing education may have deemphasized structure, argument development, and organization in favor of a "personal-style pedagogy, or grammar drills, or the five-paragraph theme, or exploration of personal experience").

159. *Id.* at 90 (reporting research that college students' writing processes typically involve "severely truncated pre-writing and rewriting stages").

160. See EDWARDS, *supra* note 157, at 69. Even the reasons why law is so writing-intensive are not intuitive. In previous educational settings, students may have approached writing as a linear project of "arranging" information rather than as the paramount expression of analytical thought and communication. *Id.*

161. *Id.* at 70-74; Parker, *supra* note 4, at 581 (noting the law-trained reader is likely to be busy and therefore expects a document that is "easily accessible").

lawyers have finite attention spans and value straightforwardness; they do not crave subtlety as a collegiate or graduate academic audience might.¹⁶² Indeed, many 1Ls are not even aware that they are writing for such an audience—that their legal writing professors assume the persona of lawyers or judges when evaluating their papers. Operating according to previous academic experiences, 1Ls may think that their professor is the only relevant audience.¹⁶³

None of this is to say that law students are not bright or adaptable, or that they are responsible for figuring out the conventions of this new community. At an early point in law students' education, law professors must explain legal discourse conventions and take responsibility for reinforcing them.¹⁶⁴ But in the first semester of law school, faced with so many unfamiliar and counter-intuitive conventions, law students find it exceedingly difficult to synthesize them all as they delve into their first legal writing projects.

C. *Expert Versus Novice Approaches to Legal Analysis*

Beyond difficulties with transfer and adapting to legal discourse, 1Ls struggle in thinking, reading, and writing about law because they have not yet mastered the methods that experts use to perform these tasks. Learning theorists, composition scholars, and legal writing scholars have all observed that novices and experts approach the legal reading and writing processes differently.¹⁶⁵ Whether they are reading cases or journal articles, expert legal *readers* employ several strategies to maximize their understanding: they construct a purpose and context for their reading, read for the main idea, and develop hypotheses as they read.¹⁶⁶ Novice legal readers, though highly literate, often do not understand the purpose for which they are reading law, get distracted by micro-propositions, and simply summarize instead of engage intellectually with hypotheses and opinions.¹⁶⁷ As a result, novice legal

162. EDWARDS, *supra* note 157, at 70–74; DeJarnatt, *supra* note 11, at 512 (noting that law students must grasp that they write to ease the reader's job and that the legal audience expects the writer to do the analytical work for them).

163. Soonpa, *supra* note 3, at 90; DeJarnatt, *supra* note 11, at 509.

164. *See generally*, DeJarnatt, *supra* note 11; Parker, *supra* note 4; Williams, *supra* note 10 (noting the role of LRW professors in this educational, formative process).

165. *See, e.g.*, Christopher M. Anzidei, *The Revision Process in Legal Writing: Seeing Better to Write Better*, 8 J. LEGAL WRITING 23, 44–52 (2002); Berger, *supra* note 21; Deegan, *supra* note 147 (noting the discrepancy in techniques utilized by novices versus experts); Soonpa, *supra* note 3; Williams, *supra* note 10, at 11.

166. Berger, *supra* note 21, at 169–71.

167. *Id.*; *see* Deegan, *supra* note 147 at 162–68 (detailing difficulties that novice legal readers encounter); Elizabeth Fajans & Mary R. Falk, *Against the Tyranny of Paraphrase: Talking Back*

readers read less efficiently and retain fewer important pieces of information.

Moreover, expert legal *writers* adopt specific rhetorical strategies for producing well-organized, precise, and deep legal analysis. They use reflective writing techniques and approach the writing process recursively, moving from global to local concerns and back, and from parts to wholes and back.¹⁶⁸ Expert legal writers are also able to step back from their writing and imagine audience needs and responses.¹⁶⁹ The expert's written product is thus reader-centered, with a clear focus on the document's communicative purpose.¹⁷⁰ Novice legal writers, on the other hand, tend to view the writing process as linear, cannot remove themselves from their writing, and concentrate on telling what they know irrespective of their audience's needs.¹⁷¹ The result is a "knowledge-telling" document that memorializes the writer's thought processes but is not of great use to the reader.¹⁷²

D. Applying Transfer, Social Constructivism, and Expert-Novice Theories to Common 1L Analytical Errors

Because transfer, social constructivism, and expert/novice theories explain profound thinking challenges that nearly all law students face at the outset of their legal education, they shed light on why our 1Ls

to *Texts*, 78 CORNELL L. REV. 163, 172 (1993) (suggesting methods to "unblock" student reading and writing). Fajans and Falk point out additional faulty 1L reading strategies:

[1Ls often fail to] realize that the identification of one idea among many others is only one step towards a more complete and dynamic reading. They perform one synthesis rather than various syntheses and tend to settle too soon, too quickly, for a kind of incomplete "blocked" reading. Interestingly, the same "blocked" pattern has a tendency to characterize their writing as well; they lift various segments out of the text and then combine them through arbitrary sequential connections (usually coordinate conjunctions)—a composing mode that is marked by a consistent restriction of options to explore and develop ideas.

Id. (citing Mariolina Salvatori, *Reading and Writing a Text: Correlations Between Reading and Writing Patterns*, 45 C. ENG. 657, 661–61 (1983)).

168. Soonpa, *supra* note 3, at 90–96; *see also* Anzidei, *supra* note 165, at 30–31 (summarizing the recursive models for writing propounded by composition theorists Sondra Perl, Linda Flower, John Hayes, and Nancy Sommers); Parker, *supra* note 4, at 586 (suggesting techniques to alert students to common writing errors); Fajans & Falk, *supra* note 167, at 175–79 (analyzing elements of the writing process and comparing expert versus novice practices).

169. Soonpa, *supra* note 3, at 90–96; Berger, *supra* note 21, at 160; *see also* Kurt M. Saunders & Linda Levine, *Learning to Think Like a Lawyer*, 29 U.S.F. L. REV. 121, 141–42 (1994) (discussing more generally the cognitive differences between experts and novices).

170. Soonpa, *supra* note 3, at 92.

171. *Id.* at 91–92 ("Writer-based prose in a legal memorandum, for example, may lecture the reader on basic legal analysis or hierarchy of authority—a concept that the student writer may have needed to think through, but that a practicing attorney long since would have internalized.").

172. *Id.* at 92; Fajans & Falk, *supra* note 167, at 172.

produce such predictable errors in their writing. One error documented in our study is students' tendency to draft rules of law that are too narrow and do not fairly represent the relevant body of law. Transfer theory offers one explanation for this error. Students who cannot spot common underlying structures across cases may write overly specific rules excluding important precedents that are dissimilar on a factual level but alike on a structural rule-based level. Another transfer problem, the inability to represent facts at higher levels of abstraction, may lead a student to craft surface-level analogies, an oft-repeated error in applying law to facts. In particular, these students might compare precedent facts and client facts at such a concrete level that their legal similarities elude the reader. Alternatively, these students may draw factual comparisons that are unrelated to the rule of law; for example, they may list similarities between two incidents of discipline in the workplace without explaining what those similarities prove about a supervisor's defense to liability for intentional infliction of emotional distress.

Socialization issues may well account for a host of our study's completeness and precision errors in rules, case explanations, and applications. Students who do not know the conventions of legal discourse may write incomplete or repetitive rules because they do not understand the reader's needs for precise legal standards that move beyond fuzzy statutory language. Working under this misunderstanding, a 1L once explained in a conference that she thought she was supposed to write several rules saying the same thing using different words.¹⁷³ Because she did not know that law-trained readers expect rule sections to define legal concepts as fully as accuracy allows, this student did not move the rule section forward by giving meaning to vague terms. In addition, case explanations lacking important context—such as the court's reasoning or case facts—are understandable if the student does not know that the senior lawyer has probably not read all (or any) of the cases cited in the student's memo. A related socialization explanation for this error is that the student may view the ultimate audience as the legal writing professor, who doubtless knows the case law intimately.¹⁷⁴

173. See DeJarnatt, *supra* note 11, at 512 ("One major source of confusion for novice legal writers is understanding why their memos must be repetitive in some respects, but so lean in others. Students must learn that many of the conventions of memo or brief writing that require repetition—the Question Presented, the Brief Answer, and the introductory sections of a memo—exist for the convenience of the reader, who also wants the legal analysis succinctly stated.").

174. See Williams, *supra* note 10, at 27 (noting that when the lawyer assumes his audience has a certain amount of knowledge, the outside reader will inevitably find his discourse

In an application section, students may forego analogical comparisons altogether if they do not realize that pitting precedent facts directly against client facts serves an independent analytical purpose for the reader. While precedent facts in a case explanation tell the reader the basics of what happened in the case, those same facts juxtaposed with client facts tell the reader why the client's case should be decided the same or differently. This error's connection to socialization finds further support in the popular student complaint that precedent comparisons are just repetitive with case explanations.¹⁷⁵ Not realizing that busy, impatient readers want the writer to spell out her reasoning, students often contend that the reader is intelligent enough to figure out the relevant comparison from a case explained paragraphs earlier.

Students with novice legal reading and writing strategies may produce many of the focus- and development-related errors documented in our study. These errors appear in several legal reasoning components. If a student reading a court opinion spends too much time on the case's micro-propositions, the student may overlook the case's main holding or primary rules of law. In writing, this faulty reading strategy may take the form of a case explanation that obscures the rule of law or lacks a clear statement of the court's holding. Students who merely summarize information while reading cases instead of generating active hypotheses about the case's relationship to client facts may write truncated application sections that do not fully explore why the law dictates a particular outcome under the facts. Novice writers who use the ineffective strategy of "knowledge telling" may string together multiple case briefs—telling the reader everything they know about each case—without synthesizing the authorities into coherent rules of law, which is what the law-trained reader needs most. These same students may have lengthy case explanations with far too much factual detail, or application sections that do not meet the reader's need for direct, to-the-point analysis.

We cannot definitively establish cause and effect relationships between any theory and a student's written analytical errors. Furthermore, any given error can have multiple causes. But if we understand the theoretical underpinnings of our students' thinking challenges, as well as the "intermediate systems" that these students construct in learning legal analysis, we have a sound basis for investigating their individual thought processes to discover where

"unreadable" because he will not share the writer's assumed universe of information or experience).

175. DeJarnatt, *supra* note 11, at 512.

thought and error intersect.¹⁷⁶ We can then devise teaching strategies to redirect students' thinking as part of the writing process.

VII. TEACHING IN REVERSE: A POSITIVE APPROACH TO 1L ANALYTICAL ERRORS

To use 1Ls' analytical errors in a positive, constructive manner, we ought to take the next page from the error analysts' handbook and teach in reverse. In other words, LRW professors should view students' draft writings as a starting point, and move backward towards investigating students' thinking during the writing process.¹⁷⁷ We should take some teaching strategies back even further, confronting potential sources of error at the earliest writing stages.

Our teaching in reverse philosophy is built on the premise that many 1L analytical errors are a predictable and natural consequence of being thrust into the role of "thinking like a lawyer."¹⁷⁸ More concretely, teaching in reverse is an integrated strategy that relies on reviews of short drafts, assignment design, role play, and classroom discussions to educate students about common analytical errors, to investigate why students make these errors, and to move students past their errors.¹⁷⁹

Based on our study of student error and the learning and composition theories examined in this article, we propose three specific methods of teaching in reverse. These methods draw on principles of transfer, socialization, and expert reading and writing approaches and aim to investigate their connections to student error. The first teaching in reverse method is uniquely the product of our empirical research and our research on error analysts' teaching strategies from the field of composition. The second and third methods have been advocated in other legal writing and composition articles, but can be refined to use student error even more constructively.

176. See Bartholomae, *supra* note 5, at 255 (advocating in the Basic Writing context that if professors treat errors "as language" and assume that these errors are "evidence of intention and . . . meaningful," professors can "chart systematic choices, individual strategies, and characteristic processes of thought").

177. Using outcomes to teach students has been advocated in other contexts, such as academic support teaching. See Janet W. Fisher, *The Role of Learning Outcomes in Academic Support Teaching*, THE LEARNING CURVE, Spring 2006, at 6–7 (suggesting that faculty should "plan backward" by identifying in advance the results they intend their students to achieve because identifying these outcomes up front gives students the opportunity to "take control of their learning at an earlier stage and direct it toward more successful results").

178. See generally Williams, *supra* note 10.

179. Although the teaching in reverse strategies we propose in this article are particularly relevant to LRW professors, our recommendations can be modified for clinic and doctrinal professors.

A. New Teaching in Reverse Methods Based on Empirical Research and Error Analysis Scholarship

Together, our empirical research and the scholarship on error analysis support a direct approach to teaching in reverse: informing students up front about the errors that they are most likely to make in the writing process, explaining why they are likely to make those errors, and allowing students to check current drafts for those errors.

Identifying common errors is a manageable task. According to our research, novice law students are not making hundreds of disparate analytical errors, but instead are producing a cluster of predictable mistakes that we can name and illustrate. Warning students about these errors before they suffer significant grade consequences is a fair, effective method of teaching legal analysis. Too often, we rely on students' ability to grasp effective legal reasoning from "model" student memoranda¹⁸⁰ and assignment checklists.¹⁸¹ By supplementing these "ideals" with contextual examples of how analysis can go wrong, LRW professors provide students a more well-rounded understanding of what they are expected to do.¹⁸² In addition, by asking students to identify specific errors in their own drafts, we promote their independence, equipping them with self-editing skills that they can utilize in law practice.¹⁸³

180. Many legal writing scholars advocate the use of models of effective legal writing to teach the students how to communicate effectively in a professional setting. See *supra* notes 22, 28 and accompanying text (discussing the importance of providing students with multiple models so they can determine the characteristics of effective legal writing). However, students often view these models as a template for good writing, rather than an example of good writing, and therefore learn only to mimic the organizational and analytical strategies employed by the model's writer. Parker, *supra* note 4, at 583–84. To effectively use models, professors should expose the students to the desirable attributes of good writing and have the students identify these attributes in various examples. *Id.* More generally, Williams notes that "[a]s a novice in a field reads its socialized prose, he will predictably try to imitate those features of style that seem most prominently to bespeak membership, professional authority, expertise." Williams, *supra* note 10, at 23.

181. See *supra* notes 26–28 and accompanying text (discussing the use of checklists).

182. See Grow, *supra* note 35 (advocating a class plan that uses both "positive" and "negative" writing examples to help college journalism students distinguish effective from ineffective magazine writing). Grow bases his contrasting examples class plan on research from the field from instructional psychology, which found that the concurrent presentation of positive and negative examples helped students to "generalize to new positive examples and discriminate them from new negative examples." Ali, *supra* note 39, at 2; see also Haack, *supra* note 38, at 461; Tracy, *supra* note 4, at 317–22 (advocating the use of deficient samples, noting that "students are more receptive to understanding and applying structure if they can see for themselves why it is needed").

183. See *infra* notes 193–203 and accompanying text (discussing how to guide students in learning and utilizing revision techniques on their own work).

This up-front error-identification teaching method conforms to the techniques of expert error analysts in the field of composition, who propose that professors can deal with common errors in class.¹⁸⁴ Specifically, these experts suggest a three-step class plan: (1) present a series of passages that illustrate a specific error; (2) lead the class in discussing why the writer might have made this error, exploring its potential thought sources; and (3) ask the students to review their work for similar errors.¹⁸⁵

A parallel method works well in the legal writing classroom. Early in the semester, after students submit a short, ungraded analytical legal writing assignment but before they submit their first graded memorandum assignment,¹⁸⁶ the LRW professor can either draft or pull from the students' work¹⁸⁷ passages containing common analytical errors.¹⁸⁸ In class, these passages can be displayed one at a time on PowerPoint slides or overheads. The slides should identify the legal reasoning component represented in the passage (rule, case explanation, fact application), but not a description of the errors they contain. Students silently read the passage on each slide, volunteer to identify its analytical errors, and then suggest ways to improve the analysis.¹⁸⁹ The students' discussion of errors and improvements can prompt a lively debate about the various thinking processes that might have led to the error and the many different ways to improve the writing. The class may also discuss these errors in the context of a law-trained reader's needs for clear, concrete, accurate, and precise analysis. During the

184. Kroll & Schafer, *supra* note 5, at 247. For specific examples of composition class plans that follow this approach, see *supra* notes 83–87.

185. Kroll & Schafer, *supra* note 5, at 247.

186. By teaching this exercise before the students submit an assignment for a grade, the professor is able to redirect some of the common errors before the students are penalized for making them. The timing of this exercise alleviates some of the frustration experienced by students who complain that they are graded on tasks they could not possibly have mastered without a deeper understanding of the discourse community and the process of legal writing and revision. As noted by Williams, students benefit immensely from an understanding that their struggles in learning a new format for writing are not reflective of incompetence, but rather a natural consequence of the entry into a new discourse community. Williams, *supra* note 10, at 30.

187. Using real student errors from an actual assignment is a well-established error analysis teaching technique. See, e.g., Davis, *supra* note 62, at 64 (noting the pedagogical advantages of “pinpoint[ing] and document[ing] real mistakes” because it “allows teachers to discover the range of error their students are making” and “students appear to be interested in examining the mistakes of their fellow students”).

188. We experimented with this exercise in the fall of 2005. Since we had already begun our error study, we focused our exercise on the most common errors emerging from our research.

189. Because the students are well-acquainted with the facts and law represented in the passages, they are in a good position to offer these observations.

discussion, the students should take notes on the errors and suggested improvements.

At the end of the class discussion, the focus shifts to the students' own work. Students review their own drafts on a current memorandum assignment, searching for the same kinds of analytical errors displayed on the slides.¹⁹⁰ After a period of silent, individual review, students volunteer the errors they have spotted in their own writing, and the LRW professor may tally several broad categories on the board. The more extroverted students may even volunteer specific examples of the weaknesses they find, reading aloud a few sentences from their drafts.

Throughout the class, the LRW professor should encourage productive attitudes toward error that are well-supported in error analysis scholarship. Before showing the slides, for example, the LRW professor can emphasize that analytical weaknesses are a healthy, necessary part of the legal drafting process—that even an expert cannot produce a perfected analysis without going through multiple drafts.¹⁹¹ The LRW professor can also explain to the students that understanding their own analytical tendencies will make them more effective editors of their own work.¹⁹²

This class plan employs several learning and composition theory principles to uncover thought-error connections and to improve students' ability to position their work within the boundaries of acceptable legal analysis. The class plan promotes transfer by helping students to recognize common analytical errors on assignments with different facts and legal issues.¹⁹³ The exercise also moves students a step forward in becoming expert legal readers and writers by encouraging reflective, purpose-driven reading and editing.¹⁹⁴ Working backwards from the errors on the slides, students theorize about their

190. This student-discovery approach is well-supported in composition scholarship because it improves self-editing skills: "if students learn how to locate their own errors and correct them, they become more responsible writers." Davis, *supra* note 62, at 65.

191. Hendrickson, *supra* note 6, at 217 (emphasizing "the need for teachers to create a healthy learning environment in which students recognize that making errors is a natural, indeed, a *necessary* phenomenon in language learning" and that "[e]xcessive embarrassment caused by one's errors can be an obstacle to learning from them") (emphasis in original).

192. Grow, *supra* note 35, at 239 (teaching through negative examples trains students to be better editors of their own work because "knowing what is bad is an essential element in knowing what is good").

193. See Graner, *supra* note 85, at 41 (noting that "transfer-of-learning" occurs when "students gain insights into their own writing as they comment on the work of others").

194. Parker, *supra* note 4, at 586–87 (advocating that professors assign exercises that encourage students to reflect on their writing processes to learn essential critical reading and recursive writing skills).

origins in thought. Then, working backwards from the students' own drafts, students investigate what thinking processes prompted their own parallel errors and share that information with their peers and professor. This process rightly places responsibility on the student for the quality of his or her own writing—a tenet widely shared by the error analysts¹⁹⁵—and helps students to view “drafts of their work as fluid, rather than fixed.”¹⁹⁶ Viewing drafts as malleable is an important step toward graduating from novice to expert writer because “[a]ll ‘real’ writers revise.”¹⁹⁷ Finally, the exercise aids students' socialization to the legal discourse community by acquainting students with a law-trained reader's views of effective and ineffective analysis, and giving students a chance to make those views their own.

During this exercise, the LRW professor acts not as a “drill instructor,”¹⁹⁸ but as a coach to facilitate the process of modeling class-suggested revision techniques—another important teaching tool employed by the error analysts.¹⁹⁹ The LRW professor does not herself serve as the “model” by revising the passages for the students.²⁰⁰ Instead, the LRW professor guides the class in formulating its *own* model revisions by asking questions and calling on additional volunteers when students have difficulty seeing the errors or their solutions.²⁰¹ When the time comes for students to review their own work for error, they immediately model the group revision techniques

195. Rosen, *supra* note 62, at 64; see Davis, *supra* note 62, at 65 (“The most important goal is that students eventually be able to discover and correct their own errors.”).

196. Rosen, *supra* note 62, at 64; see Horvath, *supra* note 61, at 138 (“[R]esponses to student writing prove most beneficial when each text is itself conceived as a work-in-progress amenable to revision.”).

197. Horvath, *supra* note 61, at 138.

198. Rosen, *supra* note 62, at 64 (contrasting the less effective, teacher-directed “drill instructor” teaching model with the more effective, student-centered “coaching” model in classroom exercises on error).

199. See *supra* notes 86-87 and accompanying text (discussing the use of modeling in error analysis).

200. Rosen, *supra* note 62, at 65 (describing the effectiveness of modeling exercises that use teacher-facilitated group editing rather than teacher-directed editing as the “model,” and noting great student interest in and enthusiasm for both the group edit and the subsequent individual edit).

201. *Id.* (articulating several neutral, facilitative questions that a composition professor can ask to assist the group editing process). For example, the professor may elicit comments on the content of the paper with questions like “What do you like about this paper?” or “What has this writer done well?” When focusing on the editing process, the professor may ask questions like “Can anyone find something that needs to be changed?” In answering these questions, the professor facilitates a student-centered discussion of the potential edits to the text and the reasons why some suggested edits are more or less efficient than others. *Id.* (referring to RONALD L. CRAMER, *CHILDREN’S WRITING AND LANGUAGE GROWTH* (1978)).

that they have just learned. Among its advantages, this sort of modeling helps to “demystify processes too long considered arcane” and convinces students that revision requires “effort, thought, time, and persistence.”²⁰² The LRW professor also gains an excellent opportunity to “observe students using what they have learned as they compose.”²⁰³

The anecdotal results from our experience with this method of teaching in reverse were encouraging. Some students proclaimed this class “the most helpful” of the semester and many felt liberated by the knowledge that error was a part of the learning process rather than a reflection of their incompetence.²⁰⁴ As a result of the exercise, we enjoyed deeper class and conference discussions about students’ errors. While we have not conducted a comparative error study between the analytical performance of this year’s class and previous years’ classes, we sensed that our students were more aware of potential analytical pitfalls as they worked on their graded assignments.

By proposing this class plan, we do not suggest that a LRW professor should try to eliminate all analytical errors before students submit their papers for a grade. Rather, we advocate giving students fair notice of potential pitfalls, reassuring them that committing analytical errors is an important part of the learning process, and providing them a more concrete basis for self-evaluation. Moreover, this class plan is most effective if supplemented with other teaching in reverse techniques explained below.

B. Using Reflective Writing to Investigate Thought-Error Connections

A second method of teaching in reverse is to give students the tools to write reflectively—an essential characteristic of expert legal writers’ work. In their article on integrating the Socratic Method with the writing process, Mary Beth Beazley and Mary Kate Kearney suggest assigning private memos as a means of “understand[ing] the thought processes behind their students’ analysis” and “guid[ing] those thought processes to help students improve their analysis.”²⁰⁵ A private memo

202. Harris, *supra* note 61, at 81.

203. *Id.* at 76.

204. This knowledge was especially important for our students with strong writing backgrounds, who are often most frustrated by the struggles in mastering a new form of writing. See Grow, *supra* note 35, at 239-40 (teaching through negative examples removes the threat of failing at a task the students thought they could do well).

205. Kearney & Beazley, *supra* note 21, at 894. Kearney and Beazley point out that doctrinal professors’ use of the Socratic Method provides an even more immediate opportunity to understand students’ thought processes. *Id.* If doctrinal professors are aware of common analytical errors, as well as the theories that might explain these errors, they can modify their

is a separate document that students compose at the same time as they are working on an analytical writing assignment.²⁰⁶ In the private memo, students articulate questions that occur to them while composing and critique their own choices as they write.²⁰⁷ They may also respond to a set of pre-determined professor questions about the draft's key components.²⁰⁸

As a method of teaching in reverse, the private memo has several advantages for both professor and student. The benefit to the LRW professor is that the private memo provides a real-time glimpse into the thought processes behind students' effective and ineffective analytical choices.²⁰⁹ Particularly when the private memo writer responds to a LRW professor's questions, the memo gives LRW professors a prime opportunity to investigate a novice legal writer's "intermediate systems"²¹⁰ formed in an attempt to meet the conventions of legal discourse.²¹¹ Private memo musings also supply LRW professors with the tools to redirect students toward more advanced, effective systems with Socratic-type comments in a conference or on a draft.²¹²

Socratic questioning to investigate thought-error connections even more precisely. Johansen, *supra* note 20, discusses a similar reflective endeavor he terms a "portfolio." Johansen describes the portfolio as "simply a collection of self-selected student work. Its primary purpose is to provide a vehicle for students to reflect upon their writing as the writing class draws to a close." *Id.* at 135. In the assignment, Johansen requires the students to annotate the final drafts of their assignments, reflecting on the process of their writing and their choices of structure, style, and substance. *Id.* at 136. Johansen's portfolios accomplish many of the goals in Kearney & Beazley's self-graded drafts.

206. Kearney & Beazley, *supra* note 21, at 895. Kearney and Beazley identify some variations on this theme, such as incorporating private memo thoughts into the draft assignment itself using brackets or footnotes. *Id.* They also identify other LRW and composition professors who have used reflective writing methods that require students to consider lawyering choices and pedagogical goals, *see id.* at n.26, or to tape-record their reflections as they write, *see id.* at n.35.

207. *Id.* at 895.

208. *Id.*

209. *See id.* ("The private memo, if effectively written, opens a window for the teacher into the student's thinking processes. The view that this window provides should enable the teacher to better understand the student's writing and analytical problems.").

210. The phrase "intermediate systems" refers to students' idiosyncratic, but rational and rule-bound, efforts to conform to discourse community writing norms. Bartholomae, *supra* note 5, at 257 (citing MINA SHAUGHNESSY, ERRORS AND EXPECTATIONS: A GUIDE FOR THE TEACHER OF BASIC WRITING (1977)). These efforts are termed "intermediate" because they "mark stages on route to mastery (or, more properly, on route to conventional fluency) of written, academic discourse." *Id.*

211. *See id.* at 256 (discussing the importance of determining the Basic Writer's "interlanguage" or "approximative system" generated in an effort to master the target form).

212. *See* Kearney & Beazley, *supra* note 21, at 895.

Because the private memo encourages them to mimic the reflective strategies of an expert legal writer, the students benefit as well.²¹³ Students are forced to be deliberate about their writing choices, to crystallize their trouble spots in writing, and to pragmatically evaluate their own work.²¹⁴ And if the private memo requires students to respond to audience-focused questions, they may begin to approximate an expert's reader-based writing approaches instead of ineffective "knowledge-telling" approaches. Following an essential tenet of error analysts, the private memo also puts students in a position of relative power. Rather than working *for* the LRW professor, they work *with* the LRW professor to "formulate and express . . . thoughts," becoming "collaborators in the writing process."²¹⁵

To make the private memo an even more constructive use of student error, we propose taking the technique one step further. We suggest that LRW professors use students' reflections to pinpoint *specific* thinking challenges supported by learning and composition theories and to identify their intersections with error. The students' own private memo questions may reveal precisely what kinds of thinking challenges they are experiencing. For example, a remark revealing problems with transfer might be: "I'm having trouble organizing my analysis. Our last assignment analyzed a state tort claim's elements, and this one analyzes the elements of a federal statute."²¹⁶ A question revealing misconceptions about the legal discourse community might be, "I feel weird about synthesizing rules from all of these cases. I feel like I'm just making things up." When appropriate, the LRW professor can take

213. See *id.* at 896 (articulating that students benefit by becoming "more conscious of how they conduct legal analysis as well as how they communicate the results of that analysis," recognizing "that they make certain choices when they express their legal analysis in writing and that they must take responsibility for those choices," and encouraging "students to make those choices more carefully"); Horvath, *supra* note 31, at 138 ("Among the advantages of responding to a text as in-process is that doing so helps bring students' writing behavior closer to that of professional, or skilled, writers.").

214. See Kearney & Beazley, *supra* note 21, at 896 (discussing how the private memo can aid students in recording their decision-making processes, providing opportunities to analyze and select the best options); see also Fajans & Falk, *supra* note 167, at 167, who advocate the use of "comment sheets" for out-of-class writing assignments in an advanced legal writing seminar. In the comment sheets, the students must "analyze[] the audiences and purposes of the document and describe[] in detail the substantive, structural, and stylistic choices that flowed from their analyses." *Id.* Fajans & Falk theorize that this exercise, combined with class discussions and group writing and editing exercises, contributed to more sophisticated legal analysis and responsiveness to the audience's needs and the purpose of the document. *Id.* Furthermore, they found that their students demonstrated better control over the mechanics of their writing, including syntax and the use of modifiers and passive voice. *Id.*

215. Kearney & Beazley, *supra* note 21, at 896.

216. This quote and the next are approximations of oft-heard student remarks.

an even more direct (but gentle) approach and “interview the student and ask him to explain his error.”²¹⁷ If the private memo requires students to answer the LRW professor’s targeted questions, the questions can prompt students to scan for common analytical errors, such as repetitive rules, case explanations that omit holdings, and applications that list facts rather than apply rules to reason with the facts.

As Kearney and Beazley suggest, students can submit the private memo with a near-final, but ungraded draft in preparation for a conference with their legal writing professor. The LRW professor then gains a powerful opportunity to use error constructively. Because the LRW professor has insight into the students’ thought processes from the private memo and can compare those thoughts directly to the analytical errors that appear in the draft, she has a solid basis for further conversation and suggestive redirection.

*C. Promoting Transfer and Socialization to Redirect Students’
Thinking*

Creating a real-world environment in the LRW classroom is another productive way to use thought-error connections from an even earlier phase in the writing process. Many scholars have touted LRW professors’ conscious efforts to aid law students’ transition to the legal discourse community as a means of improving analysis.²¹⁸ But when LRW professors know what kinds of analytical errors their students are likely to make and why students might make them, LRW professors can use transfer and socialization techniques to promote more productive thinking from the beginning. Specifically, LRW professors can promote transfer and socialization through assignment design and role-playing.

We can teach in reverse at the start of the writing process through assignment design. Because a student may commit completeness and precision errors in a final memo if she does not understand a law-trained reader’s needs or work environment, LRW professors should establish a well-developed law practice purpose and context for memo

217. Bartholomae, *supra* note 5, at 265–66 (advocating the student interview as one of two key methods for gathering information about how a Basic Writing student’s text was created).

218. See generally DeJarnatt, *supra* note 11 (discussing the importance of providing students with opportunities to model the “normal discourse of law” and write for the traditional legal audience); Lysaght & Lockwood, *supra* note 144 (stating that “legal writing programs have made significant strides in using writing to help students” further develop their understanding of legal discourse); Parker, *supra* note 4 (advocating using models of effective legal writing to help students communicate “in the professional context”).

assignments.²¹⁹ Context-rich assignments not only promote transfer between the academic and law practice environments but also inculcate students with legal discourse norms.²²⁰ For example, LRW professors can communicate assignment facts through live client interviews (the way in which most lawyers learn facts) and put students in the role of the junior lawyer as sole interviewer.²²¹ Aware that the senior lawyer to whom they are writing lacks even basic information about the case, students may be less likely to write incomplete application sections that fail to flesh out evidentiary details. If the assignment contains a senior lawyer's e-mail emphasizing her pressed working conditions—busy, no time to do research, off to a deposition across the country—students will begin to understand the need for complete case explanations, well-developed analogies, and precise writing that spells out all steps in their reasoning.

To further immerse students in legal discourse conventions and target thought-error connections early on, we can use role play.²²² We can structure student conferences to resemble oral reports to partners on the status of research and analysis. Conversely, we can put students in the role of law-trained readers in class, where they evaluate a composite legal memo with the same goals and perspectives as a law firm partner.²²³ Exposed to two sides of a legal communication, students actively absorb what a law-trained reader needs and how to meet those

219. See Flower, *supra* note 85, at 69. In the composition context, Flower advocates giving assignments “which specify or have students specify a real-world purpose and a realistic audience.” *Id.* In particular, she suggests that the assignment itself should remind students that “the reader will be using your writing to make a decision on a question” and that students should “[m]ake your writing useful to your reader.” *Id.* Pedagogically, Flower contends, the real-world context and reminders “help[] writers evaluate their own writing against some standard more concrete than simply ‘good’ or ‘well-organized’ writing,” tailoring, for example, the organization specifically to the assignment’s actual purpose. *Id.*

220. Parker, *supra* note 4, at 574 (teaching “real world” assignments allows the professor to discuss the ways in which lawyers in practice use outlines, notes, and other preliminary drafts, consider the importance of audience, and adjust according to whether they work on a single matter over a number of years or work on several matters in a single day); Lysaght & Lockwood, *supra* note 144, at 92 (constructivists believe that professors should use “authentic” problem-based assignments to teach the students how law is practiced in the “real world”); Tracy, *supra* note 4, at 302–03 (simulating how lawyers approach legal problems requires the professor to explain how lawyers approach a client’s problem in practice).

221. Parker, *supra* note 4, at 582.

222. Lysaght & Lockwood, *supra* note 144, at 99 (suggesting that legal writing professors increasingly incorporate social context into their teaching by creating “law firms” so students can collaborate as associates, work on writing problems that require students to work with client files and documents, and participate in conferences with the “senior partner”).

223. Parker, *supra* note 4, at 581–82 (suggesting that first-year students learning to write an office memorandum could be given the role of the “assigning attorney” to understand the purpose and needs of their intended audience).

needs through legal analysis.²²⁴ When they reach the writing stage, students may be more likely to draft complete, precise reader-based prose because they have experienced the senior lawyer as an intelligent but impatient and goal-oriented consumer of legal communication. In these scenarios, students are also trained to store what they have learned about the needs and expectations of a law-trained reader in a cognitive “work” compartment, promoting transfer between the academic and the practical.²²⁵

D. Maximizing Our Ability to Teach in Reverse

Error analysis defies the use of any single teaching strategy. As error analysts have cautioned, “the sources of error can be complex” and certain exercises will “reach only some students.”²²⁶ The most rational way to view all of these teaching in reverse methods is as a form of “hypothesis testing: trying one technique based on analysis of the error but remaining open to other approaches.”²²⁷ LRW professors are uniquely situated within the legal academy to experiment with these methods of exploring thought and error connections. We are among the few 1L professors to operate in a “learning-center environment”²²⁸ with an emphasis on individualized instruction. To the degree that students can only learn the components of legal reasoning by “making decisions for themselves,”²²⁹ a combination of the teaching in reverse strategies we propose empowers the students to make more informed decisions throughout the various stages of the writing process.

VIII. CONCLUSION

LRW professors can continue to advance the discipline of legal writing and to teach their students more effectively by adopting the same positive, enlightened view of error that has for years characterized error analysts’ work in the field of composition. Drawing upon the error analysts’ techniques, LRW professors should study their students’

224. See Flower, *supra* note 85, at 68–69 (suggesting that composition assignments “set[] up a mutual goal which both the reader and the writer can share” so that the writer can “integrate an active consideration of the reader into the process of writing and organizing sentences”).

225. Oates, *supra* note 3, at 5 (explaining that “unless they are told otherwise,” students will store information in the same context as they have learned it, hampering, for example, their ability to draw on school learning in the work environment).

226. Kroll & Schafer, *supra* note 5, at 247; see also Lysaght & Lockwood, *supra* note 144, at 93–94 (stating that learning theory supports using “a variety of teaching methods, including those that encourage active student involvement”).

227. Kroll & Schafer, *supra* note 5, at 247.

228. *Id.*

229. Kearney & Beazley, *supra* note 21, at 892.

analytical errors and use them as opportunities to mine 1Ls' thinking and to help 1Ls understand the law-trained reader's expectations of legal analysis early in the learning process. This teaching philosophy is more productive than viewing errors as teaching or learning failures to be marked solely during the grading process. Likewise, if students are taught to view error as a healthy, necessary part of their analytical development, they can write more freely—they need not feel frustrated by their errors or paralyzed in their efforts to avoid them. Understanding up front what errors they are likely to make—and why—students can feel empowered when they are guided toward discovering their own error tendencies during the drafting process.

The teaching methods we advocate in this article strive to provide LRW professors with the tools they need to use error more constructively in the LRW curriculum. The composition and learning theories explored in this article, as well as our own study of 1L error, suggest that there are numerous opportunities to develop and experiment with methods of “teaching in reverse.” While we propose three specific teaching in reverse methods in this article, the possibilities for teaching based on this philosophy are many. Ultimately, LRW professors *can* understand why students “do what they do,” and they can do something about it in a positive, productive way.

APPENDIX A: ERROR CHART

Skill	Performed Well	Struggled	Failed
Rules			
Articulation of a synthesized rule clearly and completely: clearly written rule			
Struggle: rule is incomprehensible to unfamiliar reader Struggle: rule is one sentence when should be two or three or vice versa Struggle: rule does not articulate an affirmative standard, only what fails Failure: no statement of rule at all			
Performs accurate rule synthesis			
Struggle: relies on isolated quotes; does not use facts, holding, and reasoning of one or more cases Struggle: rule reflects incorrect reading of caselaw Struggle: rule reflects incomplete synthesis of caselaw, including too narrow Struggle: student confuses holding with rule/states rule in case-specific terms, not as a general principle Failure			
Depth of rule development			
Struggle: rule development repeats the same information with different words Failure: no rule at all			

Skill	Performed Well	Struggled	Failed
Rule/Case Explanation			
Explanation of the case in support of rule—incorporating the facts, holding, and reasoning in a way that demonstrates how the rules work with precedent facts			
Struggle: student explains only the facts of the case Struggle: student states only the holding of the case Struggle: student gives no explanation of the reasoning Failure: student merely gives a citation after the rule with no case explanation			
Explanation bears strong relationship to the rule			
Struggle: student explains parts of the case that are irrelevant Failure			
Information is presented in the proper context			
Struggle: student presents reasoning without any context (facts, holding) Failure			
Organization of multiple cases in rule explanation: organization			
Struggle: difficulty illustrating the rule when supported by multiple cases Failure: student neglects to incorporate one or more of the supporting cases Failure: student chooses incorrect precedent by misperceiving relevance or authoritative value			

Skill	Performed Well	Struggled	Failed
Rule Application			
Comparison between precedent and client facts: analogies and distinctions			
Struggle: student makes incomplete or unhelpful precedent comparisons Failure: student only lists facts; doesn't apply rule directly to facts; fails to show how comparison to precedent supports outcome for client Failure: student makes no comparison between precedent and client facts			
Comparison between precedent and client facts related back to the rule			
Struggle: need more reasoning Failure: comparison bears no relationship to rule being analyzed			
Application is complete and organized well			
Struggle: student fails to completely prove the premise Struggle: student bounces back and forth between each party's arguments rather than stating the affirmative argument, then counterargument, then rebuttal Struggle: case comparisons are haphazardly placed Failure			
Fact-to-fact comparison relies on an appropriate amount of detail from the statement of the facts			
Struggle: student uses too few client facts to explain comparison Struggle: student uses too many client facts and fails to focus on legally relevant facts Failure: student relies on no client facts			

Skill	Performed Well	Struggled	Failed
Counterargument			
Counterargument is legitimate and plausible and fully explained			
Struggle: student creates unrealistic or weak counterargument for the sake of having one Struggle: student gives incomplete explanation of counterargument Struggle: student presents unconvincing rebuttal Failure: absence of counterargument where necessary and legitimate Failure: student omits rebuttal			
Presentation of counterargument supports student's already stated position or conclusion			
Struggle Failure: student makes a conclusion contrary to that stated earlier in the brief answer or thesis paragraph			

Skill	Performed Well	Struggled	Failed
Thesis Paragraph			
Prediction of outcome for client			
Struggle: student makes prediction without context or application Failure: student makes no prediction at all			
Explanation of rules, supported by authorities			
Struggle: incomplete explanation of rules, including lack of relevant facts Struggle: incomplete use of authority to support the rules Failure: no use of authority at all Failure: no explanation of rules at all			

APPENDIX B: ERROR ANALYSIS RESULTS²³⁰

Skill	P Fall 03		P Fall 03		P Fall 04		K Fall 04		K Fall 05	# of students/ % error
	M 1	M 2	M 1	M 2	M 1	M 2	M 1	M 2	M 2	265
Rules										
Articulation of a synthesized rule clearly and completely: clearly written rule										
Struggle: rule is incomprehensible to unfamiliar reader	3/5	5/4	3/2	1/3	2/4	0/3	2/4	5/3	1/1	19.25%
Struggle: rule is one sentence when should be two or three or vice versa	1/1	0/1	2/0	1/0	0/0	0/0	0/1	1/0	0/0	3.02%
Struggle: rule does not articulate an affirmative standard, only what fails	0/0	0/0	0/0	1/0	0/0	0/0	3/3	1/1	4/1	5.28%
Failure: no statement of rule at all	0/2	0/0	0/0	0/0	1/0	0/0	1/2	0/5	0/0	4.25%
Performs accurate rule synthesis										
Struggle: relies on isolated quotes; does not use facts, holding, and reasoning of one or more cases	0/1	0/0	1/0	0/0	0/0	0/0	0/0	0/1	2/0	1.89 %
Struggle: rule reflects incorrect reading of caselaw	2/1	0/0	0/0	0/0	0/2	0/0	0/1	0/0	4/0	3.77%
Struggle: rule reflects incomplete synthesis of caselaw, including too narrow	6/0	0/2	8/8	0/6	0/15	0/2	5/16	10/1	10/2	34.34%
Struggle: student confuses holding with rule/states rule in case-specific terms, not as a general principle	0/1	0/0	0/0	0/0	0/0	0/0	4/9	6/1	3/0	9.06%
Failure	0/0	0/0	2/1	0/0	0/0	0/0	0/5	0/0	0/0	3.02%
Depth of rule development										
Struggle: rule development repeats the same information with different words	4/8	0/5	7/9	1/8	1/16	2/9	4/8	0/0	1/4	32.83%
Failure: no rule at all	3/5	0/0	1/2	0/1	0/0	0/0	0/1	0/0	0/2	5.66%

230. In each cell, the first number represents the number of students who experienced the struggle only once in the memorandum assignment; the second number represents the number of students who experienced the struggle multiple times in the memorandum assignment. In the fall of 2005, students completed a "chunk" of a memorandum, followed by a full memorandum, rather than a full memorandum and a rewrite, therefore only one assignment was available for coding from this section.

[illegible]

Rule Application										
Comparison between precedent and client facts: analogies and distinctions										
Struggle: student makes incomplete or unhelpful precedent comparisons	0/10	2/11	12/4	0/13	5/12	5/8	9/15	17/9	16/13	60.75%
Failure: student only lists facts; doesn't apply rule directly to facts; fails to show how comparison to precedent supports outcome for client	3/1	0/1	0/0	0/1	0/4	0/0	0/3	0/2	0/8	8.68%
Failure: student makes no comparison between precedent and client facts	0/4	1/0	0/0	1/1	0/4	0/0	1/9	0/2	0/5	10.57%
Comparison between precedent and client facts related back to the rule										
Struggle: need more reasoning	4/7	6/15	14/5	9/6	17/3	11/4	16/10	23/5	21/7	69.06%
Failure: comparison bears no relationship to rule being analyzed	5/4	1/3	0/1	1/1	0/0	0/0	1/8	0/2	0/6	12.45%
Application is complete and organized well										
Struggle: student fails to completely prove the premise	2/0	0/2	1/0	0/1	9/0	6/3	1/0	0/0	1/0	9.81%
Struggle: student bounces back and forth between each party's arguments rather than stating the affirmative argument, then counterargument, then rebuttal	4/3	0/2	2/0	0/0	11/1	6/3	0/0	2/0	5/0	14.72%
Struggle: case comparisons are haphazardly placed	6/0	3/7	8/4	6/4	11/2	6/3	15/7	24/3	9/1	44.91%
Failure	0/0	0/0	0/1	0/0	0/0	0/0	1/1	0/0	0/17	7.55%
Fact-to-fact comparison relies on an appropriate amount of detail from the statement of the facts										
Struggle: student uses too few client facts to explain comparison	6/3	4/1	12/6	6/7	7/4	0/0	21/2	23/2	21/1	47.55%
Struggle: student uses too many client facts and fails to focus on legally relevant facts	1/0	1/0	12/7	6/7	7/4	0/0	8/2	0/0	20/1	28.68%
Failure: student relies on no client facts	0/2	0/0	0/1	0/0	0/0	0/0	0/0	0/0	0/1	1.51%

Counterargument										
Counterargument is legitimate and plausible and fully explained										
Struggle: student creates unrealistic or weak counterargument for the sake of having one	2/0	0/0	6/4	2/3	13/1	8/0	1/2	0/0	0/0	15.85%
Struggle: student gives incomplete explanation of counterargument	6/6	3/1	5/2	1/0	0/0	0/0	12/2	2/1	0/0	15.47%
Struggle: student presents unconvincing rebuttal	5/3	3/3	5/2	0/0	0/0	4/0	13/0	0/0	0/0	14.34%
Failure: absence of counterargument where necessary and legitimate	1/1	0/1	0/2	0/1	1/0	0/0	0/1	0/0	0/0	3.02%
Failure: student omits rebuttal	0/1	0/1	1/0	0/0	1/0	0/0	0/1	0/0	0/0	1.89%
Presentation of counterargument supports student's already stated position or conclusion										
Struggle	2/0	1/0	0/0	1/0	1/0	0/0	0/0	0/0	0/0	1.89%
Failure: student makes a conclusion contrary to that stated earlier in the brief answer or thesis paragraph	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0.00%
Thesis Paragraph										
Prediction of outcome for client										
Struggle: student makes prediction without context or application	2/0	2/0	0/0	0/0	1/0	0/0	5/0	1/0	0/0	4.15%
Failure: student makes no prediction at all	4/0	1/0	4/2	2/0	5/0	5/0	4/0	1/1	0/0	10.19%
Explanation of rules, supported by authorities										
Struggle: incomplete explanation of rules: including lack of relevant facts	9/0	4/0	2/0	0/0	3/0	0/0	8/1	9/1	0/0	13.96%
Struggle: incomplete use of authority to support the rules	1/0	0/0	6/0	3/0	3/0	5/0	7/0	4/0	0/0	10.94%
Failure: no use of authority at all	1/0	0/0	1/0	0/0	5/0	4/0	7/1	1/1	0/0	7.92%
Failure: no explanation of rules at all	1/0	0/0	0/0	0/0	3/0	4/0	7/1	1/0	0/0	6.04%