Examining a Rhetorical Approach to Teaching Developmental Reading

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This chapter discusses assessment of curricular changes made to a first-year reading course required of students who do not meet the minimum score on at least one of three standardized reading exams.¹ The curriculum moved from a basic-skills, objective-testing model to a rhetorical-analysis, writing-based model. The theory driving the changes was that a rhetorical approach to developmental reading may foster better comprehension as well as critical thinking through better engagement with the material. Data examined from the first three semesters—36 sections and 633 students—includes pretest and post-test essays, final grades, and student evaluations. Results suggest inconsistent gains in identification of main idea, primary points, and bias. Course pass rates and evaluations showed more improvement. An unexpected result was that student writing about the assigned reading changed significantly, with 91 percent of post-tests at least twice as long as pretests and 71 percent having more paragraphs. Implications are that students using the rhetorical analysis, writing model may be more engaged and satisfied by the course, and the reading they learn to do may make them more engaged writers, but the approach may not improve comprehension. This study speaks to what may promote effective learning and assessment of reading.

One of the most significant areas of college reading scholarship is developmental reading pedagogy, significant not for abundance as much as duration. Developmental reading pedagogy has a very long history in the United States and is still one of the most common types of stand-alone reading courses outside of literature. Preparatory departments were common in mid-19th century colleges and universities and included special classes for the underprepared, reading and writing skills being prevalent areas of concern (Wyatt, 1992). For over 150 years now, the "problem of poor reading" continues to be addressed by developmental reading courses, and those courses continue to meet with varied levels of success.

Despite numerous scholarly articles proposing solutions and a pool of K-12 reading research theory that has trickled up to postsecondary education, we have yet to find a satisfactory way to address the reading needs of developmental college students as they begin their experiences reading across the curriculum. The deficit,

¹ The study was IRB approved and granted exemption, protocol #1305013619.

transmission, and skills-based models still used by many college developmental reading courses are criticized practices (Newton, 1999; Tierney & Pearson, 1994 [1981]), both for lack of practical effectiveness and deflation of student commitment and enthusiasm for their higher education. Experiences with such a standard approach at my university seemed to bear this out and led to the renovation discussed here.

This chapter does not claim to offer the new best way to teach first-year or developmental reading. It offers part success story and part cautionary tale as it describes a reading course renovation and subsequent study. I survey the previous course to acquaint readers with a common curriculum for college developmental reading courses and put into context the rather radical departure I took in its redesign. Following a description of the changes made, most of the chapter is devoted to the issue of assessment of the new course to provide readers some important considerations for implementing or gauging the effectiveness of similar curricular changes.

Reading Instruction, Study Skills, and First-year Orientation

The existing reading course at my university was a common incarnation of college developmental reading, an amalgam of teaching reading skills as well as study skills and freshman success initiatives. It was housed in the campus Centers for Academic Success and Achievement (CASA) and designed by its director, who had a doctorate in literature. The roughly 25 sections per semester were taught predominantly by part-time instructors in that division. The staffing was also typical. Developmental reading courses are often overseen by the campus academic support unit and taught by part-time faculty with little or no academic specialization in reading. Unlike some developmental college courses, this one did earn three credits and a letter grade.

Many students began the course frustrated. If they were not already discouraged that insufficient test scores² made the course mandatory for most of them, they took a Degrees of Reading Power (DRP) test in class on the first day that could exempt them from having to take the course if they scored high enough (most did not). The DRP requires students to select the most plausible sentences to fill in blanks within paragraphs of a short passage. This initial exam did not count toward the final grade, but another DRP test given as the final exam was worth 20 percent of the grade, so the second test was high stakes as well as stressful. A "hold" was placed on the students' registration until successful completion of the course (above a C-), and quite

² Students needed to score at least one of the following: above 450 on the SAT Critical Reading test, above 19 on the ACT Reading Test, or a score of 001 or 002 on the IPFW Reading Placement (Accuplacer) test.

a few students ended up having to retake the course to achieve a successful grade.

Frustration mounted with the reading coursework. The reading-across-the-curriculum textbook was also a common approach, focused on basic reading concepts such as vocabulary, inference, and patterns of organization. However, in addition to the 17 short-answer and multiple-choice quizzes (comprising about half of each chapter), an accompanying online component was required with numerous practice and "mastery" multiple-choice tests. Add a midterm and a final exam, and students were taking tests every week in class as well as on their own. The course also assigned additional thematic material on global issues for five short essay responses and 17 annotations of readings based on explicit directions. Although these additional assignments were arguably effective ones, students often ended up either not completing them or giving them only cursory attention.

The course also had additional components designed not for reading instruction but for new student orientation and success. Students attended and occasionally completed short assignments for 10 "community hours" and "campus connections" usually led by an undergraduate senior who focused on study skills, career identification, and involvement in campus organizations and events, often through playing games. The community hour was a fourth hour required every week in addition to the three weekly class hours. Attending all these hours with my students (some instructors did not), I noticed more apathy than frustration, although a few students complained about the relevance and the extra hour required for the threecredit course.

Separately any part of this course could have been effective, but the course was trying to do too much and serve too many purposes. Student engagement suffered, as did their grades. Many just quit coming to class or doing the required work and activities. The course did not have a good reputation, among students or their advisors. When the CASA director, who had asked me to help revise the course, left the university and my Dean moved the course to the English department and my leadership, the charge was simple: improve the D/F/W (grade of D, F, or Withdraw) rate. Certainly I wanted the new course to keep the students engaged enough to complete the course with above a D; however, I had broader and more meaningful goals for student learning.

It was midterm Spring as I was teaching my first semester of the previous course when I learned I would be taking over the course for the coming Fall. I had worked closely with the CASA director to understand the course, and I had talked with others who had been teaching it, so I understood some difficulties. As a teaching scholar of reading and of composition for over 15 years at the time, I had well-informed ideas about what to change. The greatest challenge was developmental pedagogy, which was not a familiar area for me; however, as I quickly began cramming on developmental scholarship I quickly learned that engagement and motivation are critical components.

Rhetorical Reading in the Writing Program

Moving the reading course to the Department of English and Linguistics, to be coordinated by a soon-to-be associate professor specializing in reading and composition (I was tenure-track at the time) and taught by part-time instructors in English, immediately gave the course some disciplinary clout. The community hours were eliminated, as was the hold restriction that had been requiring the attention of a full-time employee. I assigned outcomes that enabled the course to meet a new general education requirement, and I eliminated the DRP tests. These moves were all made to address procedural obstacles and stigmas that hindered student persistence in the course. To more clearly distinguish this course from the previous one, it was also renamed. COAS-W111, Critical Inquiry, became ENG-R190, Rhetorical Reading.

The new name identified perhaps the most significant change. Rhetorical analysis, one of my specializations, had been an important part of our introductory composition courses. In my own writing classroom research over multiple semesters I had observed how teaching rhetorical analysis-of purpose, audience, genre, and appeals-seemed to have led students to write better. From pretest to post-test, most showed improvement not only in content treatment but also in elimination of error, even when the writing class did not give sustained attention to grammar and spelling. My research into developmental reading pedagogy indicated that a rhetorical approach is unique, courses typically focusing on basic comprehension activities. Most developmental reading examined word choice by using suffix or prefix to help define it, not discussing the importance of using particular wording, or identifying main points, not discussing how well they are supported. My theory was that reading rhetorically could engage developmental reading students just as it did those in regular composition courses and open up the texts in a way that students would treat the content with more awareness and comprehension as well as critical thinking. In short, engagement was my primary goal, believing that if students were more intrigued by what they were reading they would give more attention to it.

As I read about common developmental approaches that worked from a remediation or deficit model, as I reflected on my own experiences of how first-year composition students could grasp rhetorical analysis and exhibit attention to detail, and as I considered scholarship on critical pedagogy, I decided to turn the new (developmental) reading course on its head. Instead of working from what students lacked and focusing on trying to re-teach that, I wanted the new course to work from what they were capable of considering and build learning from that point. I tried to foster what Young and Potter in this collection refer to as a balanced literacy approach where the rhetorical way of reading had students orient the text in terms of situation, audience, and purpose in order to better comprehend or understand it. My experience teaching COAS-W111 had shown me that its students were strong in many aspects of learning and reading, and I believed rhetorical reading could be their zone of proximal development.

Following Freire's concept of the pedagogy of the oppressed, developmental students could be the oppressed of the oppressed, relegated to vocabulary lessons and a cognitivist-based search for the main idea (Klenk & Kibby, 2000). Shaughnessy, a pivotal scholar for defining basic writing, argues that the problem with basic writers is one of inexperience, not incapability or deficiency (1979), and the same could be said for basic readers. Klenk and Kibby state, "It is generally accepted that most children who struggle to read do not require instruction that is substantially different from their more successful peers; rather, they require a greater intensity of 'high quality instruction'" (p. 668). Being treated as inferior isn't lost on college students, who silently or vocally resent the back-to-basics approach of many developmental reading programs (one college reading textbook even titles its first chapter "Back to Basics"). As several authors in this collection and other reading scholars have showed (Guthrie & Wigfield, 2000, 2006; Ruddell & Unrau, 1994; Vacca & Padak, 1990), student motivation, engagement, and self-confidence are critical for student readers.

Considering recent research on the difficulty most college students have reading, referred to in the introduction to this collection, I also wanted to make this course beneficial for any student, not just the so-called developmental one, hence the rhetorical considerations taught could be new and beneficial for all. Underlying this broader appeal is scholarship critical of the use of standardized tests such as the SAT, ACT, and Accuplacer exam still used (per academic regulation) to place students in ENG-R190 (Behrman, 2000; De Fina, Anstendig, & De Lawter, 1991; McDonald, 1965; Robinson, 1950; Simpson & Nist, 1992; Smagorinsky, 2009; Tierney & Pearson, 1994 [1981]; Valencia & Pearson, 1987). Numerous scholars have taken issue with using test scores to draw conclusions about student reading ability, which is also why I chose not to use the DRP exam that had been used for testing out and as the (heavily weighted) final exam in the previous course.³

Numerous scholars over decades have recommended teaching rhetorical reading (Haas & Flower, 1988; Lamb, 2010; Simpson, Stahl, & Francis, 2004; Warren, 2012). Haas and Flower (1988) observed how rhetorical observations worked with understanding content in their study of rhetorical reading, stating "It makes sense that readers who are trying to make inferences about author, context, purpose, and

³ In one of the preparatory workshops I conducted for new instructors of the course, experienced instructors and graduate students, I had them take a section of the DRP exam, which provides an excerpt of text to read and multiple-choice questions that require the test taker to fill in a blank at the end of a paragraph with the most appropriate option. Only one of the eight got all correct answers, and many expressed dismay and concern that the questions and options were difficult and confusing. I had a similar experience taking a sample Accuplacer reading test online.

effect . . . would be more likely to recognize the claims—both implicit and explicit—within a text" (p. 181). Warren (2012) promotes it as especially relevant for disciplinary literacy as a practice and "habit of mind" more than a strategy or skill. Indirectly, Ruddell and Unrau (1994) advocate it when they suggest student reading difficulty may be more a matter of attention to content and interest than inability to recognize or understand it. Deighton (1956) suggests it when he charges that "If [the reader] ignores the manner, tone, and purpose of the writer, he is in danger of being victimized by rhetoric" (p. 65). Not entirely breaking new ground, I also had as precedent a developmental reading program that took a critical literacy approach (Lesley, 2001).

McCormick (2003) and Haas and Flower (1988) in particular ask questions that are especially provocative for adopting a rhetorical reading curriculum for a developmental reading course. McCormick asks "Is it possible to create processes of reading such that allegedly weaker students can become actively engaged in and succeed at and may in fact excel over conventionally 'good' students?" (p. 36). Haas and Flower ask "Is rhetorical reading a strategy students could easily adopt if cued to do so?" (p. 181). Trying to answer both of these questions guided development of the R190 curriculum.

Writing replaced objective testing as the vehicle showing learning. Two required written assignments reflected the importance of using authentic and relevant texts of the student's individual choice (Guthrie & Wigfield, 2000; Nist & Simpson, 2000; Rhoder, 2002; Simpson & Nist, 1992). The first, the Decision Making assignment, required rhetorical reading and comparison of two public texts on an issue and was designed to teach awareness of claims and evidence as well as rhetorical techniques of argument. Using popular culture texts showed students how what they were learning could be applied outside of academia and let them use something more familiar first in order to scaffold (McCormick, 2003; Rhoder, 2002) for the last assignment, the Academic Text Analysis. The latter required rhetorical analysis of reading the student had been assigned in another disciplinary course compared with two other texts students found on the subject (either academic or mainstream) and was designed to teach them awareness of difference in exposition as well as how "informative" texts can also be rhetorical ones. The two writing assignments, along with a more basic introductory assignment given before those two, were designed to give practice with increasingly complex texts and deeper reading for meaning as well as surface facts.

That reading and writing are mutually supportive is well known among composition scholars and encouraged by reading scholars (Shanahan & Lomax, 1988; Simpson & Nist, 1992). The major writing assignments in R190 were a way of making visible that reading, like writing, is a process (Flower & Hayes, 1994; Tierney & Pearson, 1994 [1981]; Vacca & Padak, 1990). Requiring multiple drafts of each assignment allows for revision and continual improvement, as in composition courses, instead of one-shot, high-stakes objective tests. Part of the process also included self-assessment to develop students' metacognitive awareness of their own reading ability. In keeping with our Writing Program's practice for introductory composition courses, I did not require the use of a common rubric for evaluation, but the assignments used across sections required particular treatment such as summary and discussion of main points. I was firm that instructor feedback always be on the students' treatment of reading content, not the structure or correctness of the writing.

Teaching reading as a process helps students develop the ability to interpret and analyze, additional skills beyond comprehension. Davies in her chapter in this collection discusses the importance of teaching this multifaceted aspect of reading and discusses how writing pedagogy can inform a reading pedagogy, with an eye to teaching reading in different disciplines. Strategies we covered in R190 addressed all the process stages Davies describes: prereading, reading, and rereading. In her first-year writing course, Davies also begins reading pedagogy with rhetorical attention, valuing it for the way it opens students to the analytical and interpretive aspects as well as comprehension.

To support teaching reading rhetorically and as a process, I had a wide range of reading strategies described over years of reading and writing research. To be effective, strategy instruction needs to be given ample instructional time, use real texts with appropriate level of challenge, and be offered as a range of choices instead of mandates (Nist & Simpson, 2000; Simpson, Stahl & Francis, 2004). The strategies taught in R190 varied across sections of the course but incorporated what Simpson and Nist (2000) identify as key to effective reading strategies that promote transfer to reading in other courses and disciplines: question creation and answer (such as specific questions about appeals and claims), summary writing, making connections (such as with reading log prompts about student knowledge of subjects and comparison questions), and organizing strategies (such as concept map drawing of a text and says/does columns).

Over the course of three semesters assessed, 15 instructors new to teaching a reading course but familiar with composition pedagogy taught 36 sections and 633 students. We assigned and collected numerous measures of student learning: drafts of essays, surveys, midterms, reading logs, and pretests and post-tests. Much could be analyzed from this study, but the remainder of this chapter focuses on the pretest and post-test as measures of student reading ability.

Assessing the New Course

Using writing as a method for teaching and assessing reading in the course, instead of objective tests, could be regarded as less valid due to its subjective nature. Differ-

ent instructors would grade a written response differently and possibly evaluate improvement as well. However, the issue of how accurately "objective" tests indicate learning notwithstanding, using writing has construct validity because it will likely be a common method of assessment used in other college courses. Although final copies of the two required assignments were collected and could be used for assessment, using something produced without instructor input and guidance seemed a better measure of what students might be able to do beyond R190 in other courses. For this reason students were given a pretest reading assignment at the beginning of the semester and a post-test assignment at the end.

Both required a written response to an identical prompt, and instructors who assigned the tests in their classes were asked not to require a particular length or give guidance beyond the prompt questions. The link to the text used for each was provided to the students in advance. Instructors may or may not have provided a print version of the text, although it was encouraged. Most instructors assigned the pretest as the first reading log assignment, and students typically completed it outside of class. The post-test was completed in class as an exam during the two-hour time assigned for the final exam and was typically handwritten in an exam booklet provided for the student. I was not inclined to make the pretest a true "test" given on the first day that would be allotted a grade or points that could negatively affect student morale and course engagement (and grading on effort would have been superficial). Having it as a short or log assignment seemed a way to compel students to complete it without stress and frustration about a test situation or grade. However, the fact that the post-test was treated as a traditional exam may have affected responses, as discussed later.

My intention for the test was to see what students were capable of saying about a reading before and after R190 instruction. The hypothesis was that at the end of the semester they would be better able to notice main idea, primary points, and bias that each text contained as well as other features they had not commented on before. My experience with pretests and post-tests in my writing courses suggested their initial responses at the beginning of the semester would be mostly simple summary or personal opinion on the topic.

The prompt was the same for the pretest and post-test each semester, with one exception. In the first semester the prompt was "What do you understand about this text? How did you come to that understanding?" A cursory review of the first pretest responses suggested the prompt may be too vague, and the post-test question was revised to "Given that to understand means to comprehend, figure out, and know, what do you understand about this text? How did you come to that understanding?" The prompt was also revised in subsequent semesters. In the second semester the prompt was "Reading this text, what do you think is important to know and consider? Why?" to avoid the word "understand" and to try to elicit attention to main points ("to know") and rhetorical elements ("consider"). Again

based on responses not showing enough attention to specifics about the texts, in the third semester the prompt was revised to be very specific and direct: "What do you notice about this text, its content, and the way it is written? What are the main points the text wants to communicate to the reader?" The "What do you notice?" could elicit rhetorical attention while the "main points" question clearly asked for significant concept recognition. The difficulty formulating the prompts themselves reflected the difficulty we would see evident with establishing reading comprehension.

The texts used for the pretests and post-tests were selected for particular commonalities. All were ostensibly expository and could be located and accessed through a public search engine such as Google. Each conveyed information about its subject in a similar public readability level and was approximately the same length. The pretest text used for the first two semesters was one titled "The Black Death, 1348," and the post-test used for the first two semesters was "An Overview of Stem Cells." The pretest text for the third semester was "The Economic Case for Raising the Minimum Wage," and the post-test was "Hydraulic Fracturing."

Although subject matter differed, each text contained four distinct points along with a discernable main idea. For example, I determined the main idea of the stem cell text used in the first two semesters to be that stem cells, and embryonic stem cells in particular, have potential and are an important area for research. The four main points are the properties and differentiation of stem cells, the potential of embryonic stem cells, the limitations of adult stem cells, and the need for further research. Although the readings were informational, the subject information was limited to one predominant view, so each text had a bias. The stem cell article focused on advantages and barely referred to controversy. The bubonic plague reading was comprised of reflections on certain aspects of the disease as written by an author who lived at the time, Boccaccio. The readings used for the last semester of the study were the most obviously biased, especially if one looked at the source. The pretest text was an exposition on benefits of raising the minimum wage from the Obama administration's White House site, and the hydraulic fracturing, or fracking, text was a promotion of the benefits from a website produced by the Society of Petroleum Engineers.

A different reading and subject matter were assigned for each test in the course for three reasons: 1) so students would not respond differently simply because they recognized the reading from the pretest assignment and presumed they would be expected to respond differently, 2) so the focus was on application of reading ability and not on particular subject matter, and 3) so the instructor could use the pretest reading for instruction after the pretest assignment was completed. Trying to avoid certain problems, however, often raises others, as discussed below.

While I had planned a coding process that involved multiple raters and a common rubric for evaluating the pretests and post-tests, I had to alter the process. In

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the final semester of data gathering, I was appointed Director of Writing and given charge of employing and evaluating the part-time and teaching assistant faculty, many of whom had been teaching R190. Although it meant losing inter-rater reliability, I decided to code the tests myself. Scott and Brannon (2013) problematize the likelihood that meaningful consensus is possible in evaluating essays, even with multiple raters, especially given differences in status. I was afraid that any instructors I could solicit assistance from for the coding would either feel compelled to participate or compelled to give me assessment they thought I wanted to see, thinking that to do otherwise might jeopardize their employment preferences. I was also concerned instructors of the course would feel pressure to be too generous with assessing the post-tests, desiring to see improvement from their efforts. I had to trust my own efforts not to be inclined to do the same.

To be as objective as possible, I chose to use a very basic coding of whether students simply identified (mentioned) or elaborated (discussed in more detail) the main idea and main points in the text. Points, I believed, were clear to an attentive and moderately skilled reader, especially because many points had only one focused paragraph or a designated section. I did not count as identification simple listing of subheadings that corresponded to the points. The same coding was used for whether students recognized the bias in each reading by at least mentioning the source or using a term like "argues" (identified) or more directly discussing how the information was not objective or complete (elaborated). Eliminating pretests and post-tests that were unreadable, ones that were not part of a pair from the same student, and ones from a section where the similarity in how the students responded suggested they were given a format for response by the instructor, I had 369 pretest/post-test essay sets, comprising 58 percent of the overall student work.

Later on I initiated a second coding analysis of a selection of pretests and posttests, to gain a different perspective and if possible triangulate the findings. In 2015, I taught a graduate level seminar on reading and asked four students, none familiar with R190, to help develop a rubric and code 30 of the pretest/post-test combinations, five randomly selected from six sections of the third semester of R190. The rubric used a four-point scale, with one score set for comprehension and another for analysis. Given the context of studying reading scholarship, the seminar students determined that evidence of comprehension should include paraphrasing (not using statements verbatim), identifying the main idea, not getting lost or off-track in disassociated thoughts, and not being repetitive. They determined that evidence of analysis should include recognizing bias, thinking critically about content, correctly identifying the audience, explaining significance or interrelation of content, and seeing purpose. They examined both the minimum wage text and hydraulic fracturing text and "normed" practice student essays to calibrate their scoring, which was very close if not identical, achieving inter-rater reliability.

The four seminar students scored the pretest set in one class session and the

post-test set in the next. A score of 1 indicated no treatment or less than minimally acceptable. A score of 4 indicated exemplary treatment of all the evidence elements. The scorers were mindful that their scoring of the rubric elements should take into consideration what freshmen students (not necessarily developmental students) should be able to comprehend and analyze. I considered 2 to be a benchmark of minimal ability. Two scorers scored each pretest and post-test, and where they disagreed by more than one point a third scorer was added. I averaged the two (or three) sets of scores.

This second assessment method conducted with the seminar students is what I had originally planned, with a more holistic consideration of what comprehension and analysis look like, although it is notable that the scorers did not consider treatment of all points necessary for comprehension. The concerns I had about my position as their instructor influencing the scores was minimal because the context was a seminar and the task was a very reasonable one given the seminar content. The scoring was not part of their grade and, as I repeatedly told them I saw problems as well as merit in what I had constructed for R190, they assured me they would not let any knowledge of my investment in the new curriculum affect their scoring. Although they examined only 8 percent of the 369 test combinations, their results would help in analysis of the data overall by providing an additional analytic lens.

Results

Table 1 shows the results of my coding for student treatment of main idea, and Tables 2 and 3 show the results of coding for identification and elaboration of main points respectively. Students were able to identify the main idea better at the end of all three semesters, and they elaborated better on the main idea for the first two semesters of the revised course; however, the third semester, which used the fracking text, saw a decrease in ability to discuss the main idea in more depth. This could have been due to the website (multi-page) format of that text, which did not resemble a more traditional essay like the other texts had. While identification and elaboration of the first main point saw some slight and some significant increases, and the second point saw an increase in elaboration, the other points were identified and elaborated less in the post-test than in the pretest. This raises an interesting question as to whether a multi-page website allows for more neglect of content (not clicking to read the next section) than does text fully contained in one place and illustrates one of the problems in the choices for pre- and post-tests. For all the pretests, only 30 students (8%) covered all four points, and 49 students (13%) covered all points across all post-tests. The lack of full coverage could indicate that students have difficulty reading and comprehending long texts, but it could suggest that coverage of all four points may be a problematic way to gauge comprehension.

Semester	Pretest		Post-test		
	Identified	Elaborated	Identified	Elaborated	
First (<i>N</i> =199)	16%	28%	37%	36%	
Second (N=27)	15%	33%	44%	48%	
Third (N=143)	3%	69%	23%	48%	
Total (<i>N</i> =369)	11%	44%	32%	42%	

Note. Identified indicates the main idea was stated in the response. Elaborated indicates the main idea was discussed. Boldface indicates increase from pretest to post-test.

Table 2. Percentage of Students Identifying Supportive Points on Pretests andPost-tests

Semester	Point 1	Point 2			Point 3		Point 4	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
First (<i>N</i> =199)	22%	18%	25%	5%	43%	4%	16%	6%
Second (N=27)	4%	11%	37%	11%	26%	7%		4%
Third (N=143)	8%	31%	27%	31%	4%	24%	27%	15%
Total (<i>N</i> =369)	15%	22%	26%	15%	27%	12%	19%	9%

Note. Boldface indicates increase from pretest to post-test.

Table 3. Percentage of Students Elaborating on Supportive Points on Pretestsand Post-tests

Semester	Point 1		Point 2		Point 3		Point 4	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
First (N=199)	24%	25%	20%	29%	32%	27%	23%	9%
Second (N=27)	30%	59%	37%	44%	56%	44%	30%	19%
Third (N=143)	15%	29%	43%	31%	3%	24%	34%	15%
Total (N=369)	21%	29%	30%	31%	22%	27%	28%	12%

Note. Boldface indicates increase from pretest to post-test.

Table 4 shows the results of coding for bias, whether students recognized the inherent singular view promoted by each text. The results indicate an increase of identification and elaboration on the bias of the texts for the post-test. That the third semester did not show an increase in elaborated bias treatment may not be surprising, providing a caveat for those who might devise a similar assessment. Recognizing bias on the Obama administration website may have been easier for students who have grown up in a "red state" such as mine, where conservative politics dominate. That only about a quarter of the students recognized that the fracking

text came from petroleum engineers who have a vested interest in selling hydraulic fracturing could also be influenced by context. We might expect more awareness of this text's bias among students living in states such as Virginia or Oklahoma, where the issue is much more visible and contentious. Interestingly, Melis in this collection describes results of a survey of community college students that indicated they believed bias is the easiest aspect of a text to determine.

Semester	Pretest		Post-test		
	Identified	Elaborated	Identified	Elaborated	
First (N=199)	5%	14%	14%	12%	
Second (N=27)	7%	15%	11%	37%	
Third (N=143)	10%	53%	20%	26%	

Table 4. Percentage of Students Treating Bias on Pretests and Post-tests

Note. Identified indicates the main idea was stated in the response. Elaborated indicates the main idea was discussed. Boldface indicates increase from pretest to post-test.

Along with aggregate results, I also examined whether individual students showed improvement. Table 5 shows gain and loss for individual students regarding main idea, points, and bias. That is, coding included how many points students were able to identify or elaborate at beginning and end of semester. For example, one student identified the main idea and three of the main points in the pretest but identified the main idea and only one point partially in the post-test. Another student identified the bias, the main idea, and all four points in the pretest but identified only two points fully and one point and the main idea partially in the post-test. Therefore, both students' results suggested a loss of recognition. Aggregate results are mixed and inconclusive. Although students gained in main idea treatment for the first two semesters, they lost treatment in the third semester. Although they lost treatment of points in the first two semesters, they gained slightly in the third. Finally, students gained more than lost in the treatment of bias, with the exception of the third semester. It could be that the third semester's post-test fracking text led to a gain in points treatment because it had clear subdivisions that aided readers in identifying key points in the structure of the text. The loss in main idea treatment of this text could indicate that students were "fractured" in their cohesive thought about the text by the multiple web pages and sections on the site.

The low gains shown in treatment of the main idea, primary points, and bias recognition could also be attributed to text difficulty and structure. The texts used at the end of the semester may have simply been more difficult, which is certainly true for the first two semesters, when students moved from a simpler style and engaging subject matter to a more scholarly article; however, in the third semester students were still able to make post-test gains at least for the main idea and first two points, and both post-test texts clearly designated subtitles for their primary points. The third semester's fracking text was taken from a website and included numerous visuals, so it may have been easier and more engaging to read. The pretest text for the third semester, on minimum wage, was the only text that did not have subsection titles and likely made point recognition more difficult. Again, a caveat for researchers: select pretest and post-test material that is truly as comparable as it can be.

Semester	Main Idea		Points		Bias	
	Gain	Loss	Gain	Loss	Gain	Loss
First (N=199)	44%	23%	25%	55%	23%	16%
Second (N=27)	52%	22%	41%	45%	37%	11%
Third (N=143)	18%	33%	43%	37%	16%	44%

Table 5. Percentage of Students Showing Gain and Loss in Treatment of Main Idea, Points, and Bias from Pretest to Post-test

Table 6 suggests what students might have learned and been able to apply regarding rhetorical awareness. Coding noted where students wrote about credibility, audience, support, and wording or whether the actual rhetorical terms were used. This coding was used only for the post-tests because rhetorical concepts were introduced in the course and the post-test could gauge how much students applied that knowledge. A few students noted rhetorical principles (not by their Latin terms) in the pretest, but not enough to warrant their attention for the pretest, so any pretest/post-test comparison would have naturally weighed in favor of post-test results.

Semester	Ethos/	Pathos/	Logos/	Style/
	Credibility	Audience	Support	Wording
First (N=199)	49%	45%	14%	12%
Second (N=27)	33%	19%		7%
Third (N=143)	50%	27%	13%	23%
Total (N=369)	48%	36%	12%	16%

Table 6. Percentage of Students Treating Rhetorical Elements in Post-tests

In post-tests, nearly half the students in the first semester treated ethos, matters of credibility that included discussion of author, publisher, and sources, and exactly half treated it in the third semester. Pathos, including discussion of emotional appeals and likely or intended audience, was treated by 45 percent of the students in the first semester but by far fewer students in the third semester. Logos, matters of strength of claims and support, got the least treatment consistently. These results suggest that matters of ethos or credibility are easier for students to treat than matters of pathos and logos. This better attention to credibility could be due to its emphasis for research writing in both secondary and postsecondary education.

The results of the seminar students' scoring, in Table 7 reflect some of the mixed results seen in the coding I used, with individual gains and losses, but overall the results of their scoring indicate slight gain in analysis and greater gain in comprehension from pretest to post-test. Their scoring indicates that 40 percent of the 30 students scored at least a point higher in comprehension and/or analysis, but it also shows that 33 percent of the students lost a point in one or both areas. When I compared my coding for main ideas, points, and bias for the same 30 students, the seminar students' scoring for comprehension and analysis on the pretest was very similar, disagreeing on only four pretests; however, their scoring and mine differed on 11 of the 30 post-test responses. Their higher scores could reflect a subconscious influence to score higher when they realized the post-test set was from the end of the semester, or, conversely, they could reflect that their rubric for comprehension and analysis is a more accurate one than simple counting of main idea and points treatment.

Table 7. Scoring of Pretest and Post-test for 30 Students Using a Rater-Generated Rubric

	Pretest	Post-test
Average comprehension score	1.4	2.2
Average analysis score	1.6	1.8
Percentage showing no change		10% (n=3)
Percentage showing .5-point increase		33% (n=10)
Percentage showing 1-point increase		40% (n=12)
Percentage showing 2-point increase		20% (n=6)
Percentage showing 1 point or less decrease		33% (n=10)
Percentage showing both loss and gain		17% (n=5)

Note. The pretest and post-test for the 30 students were randomly selected from multiple instructors in the third semester. The rubric used a four-point scale, 4 being highest.

One unexpected difference between pretests and post-tests quickly became apparent in my coding. Students were clearly writing more at the end of the semester. Of the 369 students, 91 percent increased word count in their post-tests, and 22 percent wrote four times as much or more. The average number of words in the post-test essay responses doubled in the third semester and more than doubled in the first semester. While in the third semester this could have been due to the fracking text being about 35% longer than the minimum wage pretest, the texts

used for the pretests and post-tests in the first two semesters were of comparable length (about 1650 words and about 1750 words respectively); therefore, increased student writing about the readings does not seem attributable to the length of the assigned texts.

Of course, one plausible explanation is that what the students learned about reading in the course enabled them to feel they had more to say about it. However, a very influential fact was that students were sitting in a classroom completing the post-test as a final exam. A captive audience, or captive authors in this sense, they may have felt more compelled to use the two hours than they had the out-of-class time given for the pretest. Nonetheless, I saw one of the same results I had in my writing classroom research, that structure also changed, with students composing in more paragraphs at the end of the semester instead of one long stream of thought evident at the beginning. Table 8 shows the average number of paragraphs almost doubled every semester, with 71 percent of the students using more paragraphs and 23 percent using four times as many or more. Further study of pre- and post-tests written under identical conditions and using highly comparable texts could help to clarify the possible significance of this length difference.

Semester	Paragraphs V		Words			
	Pretest	Post-test	Pretest	Post-test		
First (N=199)	2.3	4.9	190	472		
Second (N=27)	3.2	5.1	252	505		
Third (<i>N</i> =143)	2.5	4.3	244	461		

Table 8. Average Number of Paragraphs and Words on Pretests and Post-tests

Two more assessments collected for this study are purely quantitative. One is the student course evaluation, completed in class anonymously by each student without the instructor presence at the end of the semester and shared with instructors after final grades are posted. The evaluations address the course and the instructor, but for this study I collected data only for the six questions that pertained to the course. The questions asked whether the student thought the course had clear goals, whether the course met its goals, whether it was organized, whether the student had sufficient opportunity to be evaluated, if he or she learned in the course, and if the course was worthwhile. Each student marked one score on a five-point Likert scale for each question, with 1 being the lowest score (indicating disagreement) and 5 being the highest (indicating agreement). Using our department means for writing courses for comparison, I determined that a score of 4 would be the benchmark.

As Table 9 indicates, with the exception of one question in one semester, the benchmark was met (the average student score for whether the course was

worthwhile was 3.90 in the first semester). The overall average rating of the course across all the semesters for the six questions was 4.24, securely in the "Agree" category and within standard departmental parameters. The high mark is noteworthy especially because the benchmark of 4 that I set could be steep considering the course was a new one and mandated by test scores. It is interesting that students felt they learned from the course but still showed more reserve on the course's usefulness, suggesting that instructors need to be more verbally and pedagogically clear about how what students learned to do could transfer to other reading situations across disciplines and outside academia.

 Table 9. End-of-Semester Anonymous Student Evaluation Scores for the

 Course

Semester	Clear Goals	Met Goals	Organized	Sufficient Evaluation	Learned	Worthwhile
First (N=280)	4.25	4.18	4.09	4.24	4.10	3.90
Second (N=39)	4.33	4.36	4.29	4.48	4.25	4.25
Third (N=198)	4.34	4.27	4.38	4.40	4.20	4.05

Note. Student evaluations used a five-point Likert scale with 1 being Strongly Disagree and 5 being Strongly Agree. Questions asked if students agreed with the following: course goals were clear, the course met its goals, the course was well organized, they had sufficient opportunity to be evaluated, they learned in the course, and the course was worthwhile.

Like the students in Gogan's study, in this collection, ours indicated by their scoring of the course that they felt they had learned more than the assessment suggests they had. This may be tapping into what Gogan discusses as receptive activity, where readers gain agency over what meaning they derive from a text. Hence, students in R190 may feel empowered by doing something to the text, hunting for rhetorical moves and evaluating points, instead of just feeling they should receive the main points from it.

Another quantitative measure, course final grades, directly addresses my Dean's charge to improve the successful pass rate, and here the results are significant. Table 10 shows the final student grades for the course for the three semesters and the two prior, before the course was revised. Failing grades (F) dropped from 22 percent in the semester prior to the course change to a high of 12 percent in the third semester of R190. The overall no-pass rates for the course, determining whether students needed to retake it, dropped from a high of 30 percent to a high of 20 percent. Grades in the D range remained similar. Grades in the C range decreased in R190, and grades in the A range increased. This could be argued as grade inflation on the part of the R190 instructors; however, it could also be argued as the result of qualitative assessment and teaching reading as a process where improvement could be recognized.

	Previous Cou	urse	Renovated Course			
Course Grade	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	
	(N= 396)	(N=73)	(N=341)	(N= 49)	(N=243)	
A range	11%	5%	35%	31%	30%	
B range	32%	36%	33%	29%	35%	
C range	34%	32%	15%	24%	19%	
D range	7%	5%	6%	6%	4%	
F	15%	22%	10%	10%	12%	
Unsuccessful	24%	30%	18%	18%	20%	

Table 10. Student Course Grades Before and After the Course Renovation

Note. Range includes plus and minus grades. Unsuccessful refers to those students receiving a C-, D range, or F final course grade.

Reflecting on the Curriculum and Study

Certainly one explanation for the less-than-striking gains and even losses in recognition of main idea, primary points, and bias could be that a rhetorical reading approach is not effective for teaching reading. What McCormick (2003) warned may have come to pass, that "[W]hen one gets into specific classroom settings, many theories, particularly if they have not been tested on a wide cross section of students, simply fall apart" (p. 28). Instruction in rhetorical analysis may distract students from comprehending primary material instead of promoting more attention to it, as I had hoped. Low gains in attention to rhetorical elements could indicate that determining the more concealed argument of an "informational" text may have been asking too much of the students, although I tend to disagree based on my experience teaching rhetorical analysis, which was a new concept to many freshmen at least in my first ten years of teaching.

Another possible explanation for the low gains and losses is that the strategies being taught need improvement. Some, such as concept maps that can visually represent main points, emphasis, and relationships within the text content, may need to be emphasized and done repeatedly to try to encourage students to use them in other contexts. How much we emphasize active reading strategies that ask students to mark the text may need re-evaluating because much of what students read is electronic and does not easily allow marking, and students will likely not print off such texts unless they are asked to do so by an instructor. Students need to be shown that taking notes or making visual representations of what they read is useful to aid in comprehension and critical thought. One strategy I do believe would benefit from less attention may be previewing that pertains more to text structure than it does generating ideas about content. Many students were content on the post-tests to simply describe what they saw on the text instead of discussing it in ways that illustrated comprehension and analysis.

The tendency for first-year college students to just describe and summarize (or use quotations) is a powerful one to overcome. These students have almost certainly taken tests in high school that covered detail from nonfiction texts, but much of that treatment could have been in the form of multiple-choice exams, which allows students to recognize and select what is correct or accurate from a given set of responses instead of extracting it themselves and applying it, the latter more likely what will be asked of them by college tests. Furthermore, while rhetorical analysis of nonfiction has become more popular in college composition classes, many high school language arts classes practice interpretation of fiction and personal reflection on it much more. If students do not grasp rhetorical analysis they can revert to simple description and summary.

I do believe that the change in the length of student writing from pretest to posttest is important when considering reading ability. Students clearly had more to say about what they were reading for the post-tests than for the pretests. Although they knew their post-tests would be graded, they knew writing quality was not the focus and length was not a grading factor, and they wrote more and paid greater attention to structuring their responses in the post-test. Some students were also taking the introductory composition course at the same time, so the attention to writing may have been more natural. Nonetheless, it is reasonable that they were thinking more about their reading and feeling more confident in expressing what they read.

Limitations of this Study

In drawing any conclusions, factors that inhibit accurate assessment need to be identified and addressed. One very obvious limitation regarding the use of pretests and post-tests as the primary measure of learning is that the texts used for the two were different in subject matter, format, and style. The conditions under which they were completed also varied. The level of student familiarity with the subject and regard for the activities' value could have easily skewed results. Standardized reading tests, the other and more common assessment, present text excerpts that also could be familiar or unfamiliar subjects for the students, but the format and style are generally the same. Those tests also get serious regard from most students (perhaps too much). While making the post-test used in this study a final exam was designed to foster serious regard and avoid the possibility of skipping it that could have happened if it were just a reading log assignment, it complicates comparison to the pretest, which was not given as much weight in the overall course grade.

Analysis of the two course assignments and reading log responses could have

also yielded important results that limit conclusions drawn from this study. If we are trying to teach reading as a process, and I argue that we should, the products of that process are worth considering, even if they were guided by instructor and peer feedback. If we regard reading, like writing, as a social and collaborative activity, then we should look at what students are able to do in that context as well as what they do on their own on a "test." Another limitation is coding structure and the lack of inter-rater reliability. The seminar graduate student coding of 30 pretest/ post-test combinations illustrates that reliable coding of a qualitative measure is very important for drawing conclusions. One person's perspective on assessment is almost always less desirable than the consensus of a group.

Perhaps the greatest limitation to this study is lack of a control group and the related limitation of instructor differences in teaching. The sudden move of the reading course to my department disrupted my plan to initially introduce the rhetorical reading approach in one section only. The problem with the pass rate and stigma attached to the course also made it imperative to "do something now" for all students instead of introducing changes gradually to control for variables. Essentially it became an intervention study. The fact that multiple instructors taught the course in multiple ways in their classrooms is an unavoidable critical limitation. To decide whether or not rhetorical reading is a good vehicle for teaching reading, the way it is taught is crucial.

Future Research and Curricular Change

Based on the results and their interpretation, I plan changes to R190, and as of this writing have already piloted some of those. The rhetorical approach will remain for the immediate future, but elements of the curriculum need adjustment, especially to more specifically address comprehension. The use of writing as the primary grading method will remain, but other measures of course effectiveness will be introduced.

Instructors need to give more sustained attention to recognition and explanation of primary points a text makes. Instructors need to make clear how rhetorical analysis can help uncover those points and think critically about them, especially in other courses across the disciplines. I have also asked instructors to redirect students away from strategies that enable focus on describing the text to ones that require thoughtful consideration. I have already rewritten the two required assignments to promote more attention to purpose and support of claims.

A common rubric for evaluating the two required assignments will also be created, collaboratively among the R190 instructors. This will allow for better understanding of how to grade the assignments, especially for new instructors, and it will provide a more reliable assessment measure. The rubric created and used by my graduate seminar students shows this need not be an onerous task. Not every instructor likes using a rubric, but for initial norming purposes, it could help different teachers with different styles feel on the same page, at least when it comes to evaluation of student work.

Study of the course will also continue, with changes. I plan to use an objective test, something similar to the DRP or Nelson-Denny, taken in class at the beginning and end of the semester, to add a more objective measure of comprehension. The results will not be discussed, so when students see the same exam again they will not know if they answered correctly the first time and may respond the same or differently. The multiple-choice test results will be an interesting comparison to the qualitative measure of the students' written responses. A more traditional final exam will also be required, one with multiple-choice answers, short answer, and short essay based on a provided text.

Another added measurement of learning will be longitudinal. At the end of the semester following that in which R190 is taken, an anonymous online survey will be sent to the students who took it, asking such questions as whether they used in other courses what they learned in the reading course. It would be interesting to see if what Odom found and discusses in this collection is true, that students think the writing helps their reading. Odom found that over 85 percent of students thought a writing assignment helped them better understand the text but, interestingly, also found less agreement among the faculty of this benefit based on their assessment. The survey will allow students more reflection on the practical application of what was learned than does the end-of-semester evaluation and could be a good indicator of transfer. Young and Potter in this collection, while they emphasize measurable improvement, warn not to focus on short-term gains at the expense of instruction that promotes transfer. Developmental reading researchers (Caverly, Nicholson, & Radcliffe, 2004; Holschuh & Paulson, 2013; Simpson, Stahl, & Francis, 2004; Tierney and Pearson 1994 [1981]) also call for more longitudinal evaluations of developmental programs and policies but caution against trying to capture the complexity of transfer. Using grades made in other courses, GPA, or just persistence cannot be reliable indicators of the reading course's success due to many other variables that can affect such measures.

The results of this study seem to indicate that the rhetorical analysis approach did not consistently lead to better comprehension, but neither do the results suggest it is a failed approach. The improved grades and completion rates and the high evaluation marks given by students are important measures, especially considering the course in the context of a higher education environment that increasingly emphasizes retention and persistence. Results indicate the rhetorical analysis approach engaged the "developmental" students and that they were able to achieve better grades through it than had students in the previous course.

Two problematic considerations give pause in considering rhetorical reading for

reading pedagogy, developmental or otherwise. One is that getting "the main idea" and "the main points" are debatable concepts—and as Gogan discusses in this collection should not be treated as the most important elements for reading that make the most difference for students—but rhetorical elements can also be treated too rigidly. McCormick writes, "Much work that is done in 'critical thinking,' for example—a site in which one might expect students to learn ways of evaluating the 'uses' of texts and the implications of taking up one reading position over another—simply assumes an objectivist view of knowledge and instructs students to evaluate texts' 'credibility,' 'purpose,' and 'bias,' as if these were transcendent qualities" (1994, p. 60).

A related problem made clear by this study in particular is how we define comprehension. What does it mean, and how do we know it has happened? Words used to describe comprehension, such as understanding or knowing, are equally as ambiguous. Does comprehension mean correct fact extraction and explanation, or critical thought about what fact really is, or both? Were the R190 students who did not list each of the four primary points made by the pretest and post-test text truly not comprehending the text?

These questions and the value I place on rhetorical awareness are what lead to my definition of college reading. Haas and Flower's definition of reading, "A process of responding to cues in the text and in the reader's context to build a complex, multi-faceted representation of meaning" (1988, p. 169), is apropos for college. However, based on my findings from this study, I extend that definition to try to capture other aspects I find necessary: a self-aware process of engaging texts that involves being able to identify, reason with, and apply important stated and unstated content and consider the significance of the content, the text's context, stated and possible purposes, and effect on audiences. This definition is not as elegant in simplicity as that of Haas and Flower but is complex, as may be the way we define (and delimit) what developmental means.

References

- Bean, J. C., Chappell, V. A., & Gillam, A. M. (2014). *Reading rhetorically*, 4th ed. New York, NY: Longman.
- Behrman, E. (2000). Developmental placement decisions: Content-specific reading assessment. *Journal of Developmental Education*, 23(3), 12–18.
- Caverly, D. C., Nicholson, S. A., & Radcliffe, R. (2004). The effectiveness of strategic reading instruction for college developmental readers. *Journal of College Reading and Learning*, *35*(1), 25–49.
- De Fina, A. A., Anstendig, L. L., & De Lawter, K. (1991). Alternative integrated reading/ writing assessment and curriculum design. *Journal of Reading*, *34*, 354–359.
- Deighton, L. C. (1956). New approaches to reading. College Composition and Communication, 7(2), 63–67.

- Flower, L., & Hayes, J. R. (1994 [1981]). A cognitive process theory of writing. In R.
 B. Ruddell, M. Rapp Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading*, 4th ed. (pp. 928–950). Newark, DE: International Reading Association.
- Furman, J., & Stevenson, B. (2014). The economic case for raising the minimum wage. *The White House, President Barack Obama*. Retrieved from https://www.whitehouse. gov/blog/2014/02/12/economic-case-raising-minimum-wage
- Guthrie, J. T., Wigfield, A., Humenick, N. M., Perenevich, K. C., Taboada, A., & Barobsa, P. (2006). Influences of stimulating tasks on reading motivation and comprehension. *The Journal of Educational Research*, 99(4), 232–246.
- Guthrie, R., & Wigfield, A. (2000). Engagement and motivation in reading. In M.Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research*, *Vol. 3* (pp. 403–422). Mahwah, NJ: Lawrence Erlbaum Associates.
- Haas, C., & Flower, L. (1988). Rhetorical reading strategies and the construction of meaning. *College Composition and Communication*, *39*(2), 167–183.
- Holschuh, J. P. & Paulson, E. J. (2013). *The terrain of college developmental reading*. College Reading and Learning Association.
- Hydraulic fracturing. (n.d.). *Energy4me Essential Energy Education*. Retrieved from http://energy4me.org/hydraulic-fracturing/
- Klenk, L., & Kibby, M. W. (2000). Re-mediating reading difficulties: Appraising the past, reconciling the present, constructing the future. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.) *Handbook of reading research, Vol. 3* (pp. 667–690). Mahwah, NJ: Lawrence Erlbaum Associates.
- Lamb, M. (2010). Teaching nonfiction through rhetorical reading. *English Journal, 99*(4), 43–49.
- Lesley, M. (2001). Exploring the links between critical literacy and developmental literacy. *Journal of Adolescent and Adult Literacy*, 45(3), 180–189.
- Matthews, K. (n.d.). An overview of stem cells. *Openstax CNX*. Retrieved from https:// cnx.org/contents/32b0b61a-6ad4-44fc-a636-9060e2c9cb07@1.1
- McCormick, K. (1994). *The culture of reading and the teaching of English*. Manchester, England: Manchester University Press.
- McCormick, K. (2003). Closer than close reading: Historical analysis, cultural analysis, and symptomatic reading in the undergraduate classroom. In M. Helmers (Ed.) *Intertexts: Reading pedagogy in college writing classrooms* (pp. 27–49). Mahwah, NJ: Lawrence Erlbaum Associates.
- Newton, E. (1999). "Josh": Case study of an underprepared college student in a responsecentered composition classroom. In B. Martin Palmer (Ed.) *College reading: Perspectives and practices* (pp. 3–19). Carrollton, GA: College Reading Association.
- Nist, S., & Simpson, M. L. (2000). College studying. In M. Kamil, P. B. Mosenthal, P D. Pearson, and R. Barr (Eds.), *Handbook of reading research, Vol. 3* (pp. 645–666). Mahwah, NJ: Lawrence Erlbaum Associates.
- Rhoder, C. (2002). Mindful reading: Strategy training that facilitates transfer. *Journal of Adolescent and Adult Literacy*, *45*, 498–512.
- Robinson, H. A. (1950). A note on the evaluation of college remedial reading courses. *Journal of Educational Psychology, 41*(2), 83–96.
- Ruddell, R. B., & Unrau, N. J. (1994). Reading as meaning-construction process: The

reader, the text, and the teacher. In R. B. Ruddell, M. Rapp Ruddell, & H. Singer (Eds.) *Theoretical models and processes of reading*, 4th ed. (pp. 996–1056). Newark, DE: International Reading Association.

- Scott, T., & Brannon, L. (2013). Democracy, struggle, and the praxis of assessment. *College Composition and Communication*, 65, 273–298.
- Shanahan, T. & Lomax, R. (1988). A developmental comparison of three theoretical models of the reading-writing relationship. *Research in the Teaching of English*, 22, 196–212.
- Shaughnessy, M. P. (1979). *Errors and expectations: A guide for the teacher of basic writing.* New York, NY: Oxford University Press.
- Simpson, M. L., & Nist, S. L. (1992). Toward defining a comprehensive assessment model for college reading. *Journal of Reading*, *35*, 452–458.
- Simpson, M. L., & Nist, S. L. (2000). An update on strategic learning: It's more than textbook reading strategies. *Journal of Adolescent and Adult Literacy*, 43, 528–541.
- Simpson, M. L., Stahl, N. A., & Francis, M. A. (2004). Reading and learning strategies: Recommendations for the 21st century. *Journal of Developmental Education*, 28(2), 2–32.
- Smagorinsky, P. (2009). The cultural practice of reading and the standardized assessment of reading instruction: When incommensurate worlds collide. *Educational Researcher*, *38*, 522–527.
- The black death, 1348. (2001). *Eyewitness to History*. Retrieved from http://www.eyewitnesstohistory.com/plague.htm
- Tierney, R. J., & Pearson, P. D. (1994 [1992]). A revisionist perspective on "Learning to learn from text: A framework for improving classroom practice." In R. B. Ruddell, M. Rapp Ruddell, & H. Singer (Eds.) *Theoretical models and processes of reading*, 4th ed. (pp. 514–519). Newark, DE: International Reading Association.
- Tierney, R. J. (1994[1981]). Learning to learn from text: A framework for improving classroom practice. In R.B. Ruddell, M. Rapp Ruddell, & H. Singer (Eds.) *Theoretical models and processes of reading*, 4th ed. (pp. 496–513). Newark, DE: International Reading Association.
- Vacca, R. T., & Padak, N. D. (1990). Who's at risk in reading? *Journal of Reading*, *33*, 486–489.
- Valencia, S., & Pearson, P. D. (1987). Reading assessment: Time for a change. The Reading Teacher, 40, 726–732.
- Warren, J. E. (2012). Rhetorical reading as a gateway to disciplinary literacy. *Journal of Adolescent and Adult Literacy*, *56*, 391–399.
- Wyatt, M. (1992). The past, present, and future need for college reading courses in the U.S. *Journal of Reading*, *36*(1), 10–20.