15 Correctness Revisited: How Students (Mis)Identify and Comment on Error in Peers' Drafts

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Abstract: Because teachers continue to feel conflicted about the role of error in writing instruction, it is important to understand students' existing capacities for identifying and avoiding error. Student peer review offers a unique way to study how students identify and discuss error in their peers' drafts, thereby informing intervention both in foundational courses and in courses across the curriculum. This chapter describes a study of student error identification in L1 writing courses in the United States. Students in two sections of a foundational university writing course commented on each other's drafts using an oral screencast program. Drafts were coded for the 20 most commonly identified errors from a previous corpus study. The 58 screencasts were transcribed and coded for every error (mis)identified by students. Results showed that students identified approximately one-tenth of the errors made by their peers, while approximately one in four errors identified were not actually errors. A comparison of results from the two sections (taught by different instructors) also revealed stark differences in the focus and nature of students' comments on error. Because both sections of the course were taught to the same outcomes, the results point to the influence of instructional ideology and genre of the writing on students' constructs of the role of error in peer review.

Keywords: error, grammar, peer review, correctness, instructional ideology

In the field of writing studies, the subject of error detection has historically played a vexed role. For several decades, the literature on teacher response in first-language (L1) instruction eschewed a focus on "surface" details in favor of advocating for broader structural, rhetorical, and meaning-based concerns

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(e.g., Hillocks, 1986; Hunter & Wallace, 1995; McQuade, 1980).[1] This orientation has also characterized writing-across-the-curriculum programs as well as writing centers, whose missions often overtly explain that tutors will work with students on all aspects of their writing, avoiding a central focus on grammar and correctness (Burchett, 2019).

Although writing researchers have long been interested in the nature, causes, and detection of error (Anson, 2000; Bartholomae, 1980; Hartwell, 1985; Kroll & Shafer, 1978; Noguchi, 1991; Shaughnessy, 1977; Weaver, 1996), error still often exists, but at the margins of instructional attention in writing programs, writing across the curriculum/writing in the disciplines (WAC/WID) programs, and writing centers, with commentary that "systematic instruction in grammar, usage, mechanics, and punctuation is on the wane . . . " (Sloan, 1990, p. 299). Uncontested, long-standing research from meta-analyses supports such an order of priorities. George Hillocks (1984) remarked that "the study of traditional school grammar (i.e., the definition of parts of speech, the parsing of sentences, etc.) has no effect on the quality of student writing" (p. 160), echoing the conclusion of Richard Braddock et al. (1963) twenty years earlier that "the teaching of formal grammar has a negligible or . . . even a harmful effect on the improvement of writing" (pp. 37-38). More recently, a meta-analysis of studies focusing on elementary and high school instruction found a statistically significant negative effect for grammar instruction across all ability levels, "indicating that traditional grammar instruction is unlikely to help improve the quality of students' writing" (Graham & Perin, 2007, n.p.).

At the same time, few educators recommend entirely ignoring surface error. And in spite of the conclusive results of the research on grammar, teachers from the early grades through graduate education continue to identify error, admonish students to study it, and recommend a variety of resources to help them avoid it. If educators in foundational writing courses as well as in discipline-based (WAC/WID) courses are to develop theoretically informed methods to help writers identify and avoid error—since it will never disappear as a concern—they need to know more about the role of error in students' writing. This includes understanding students' constructs of error, what errors they identify or mis-identify in their own and each other's writing, what explanations, if any, they offer, and whether those explanations are accurate. Students' identification of error may come from external sources

1 In L2 instruction, focus on surface correctness is justifiably stronger because of the need for students to learn grammatical, lexical, and other aspects of the language, and the challenge is to interweave such instruction into broader rhetorical concerns.

(such as rules taught to them explicitly in previous instruction, or accurate or erroneous feedback from digital grammar tools), or from their difficulties processing a text (sensing that "something is wrong" and simply guessing that an error is creating the difficulty). In addition, both explicit and tacit rules that students bring to peer review can lead to the incorrect identification of error, the imposition of a rule where none is needed, or the overgeneralization of a learned rule to cases where it should not apply.

Knowing more about these aspects of students' knowledge and abilities is crucial for the design of effective programs for faculty development across other courses and disciplines, as well as responsible, theoretically informed ways to integrate the detection, learning, and repair of error into writing instruction. A number of methods can be employed to investigate such questions; for example, case studies using discourse-based interviews (Odell et al., 1983) could be conducted with students about their own drafts or the drafts of their peers to bring prior knowledge about error to the surface. Before unearthing such complexities in students' constructs of error, however, it is important to know more about basic patterns of error identification on a larger scale. How often do students identify error in their peers' drafts?[2] How accurate are they? Which errors do they identify? How do they talk about these errors? It is these questions that the study reported in this chapter sought to investigate.

Initial Explorations of Error in Peer Response

The study of student peer response is often confounded by the effects of data collection. Video or audio recording live peer response groups can affect students' interactions or make them self-conscious. This study employed a screencast program that students used to comment on their peers' rough drafts for an assignment. The screencast method allowed for a naturalistic inquiry of error conceptualization and identification in students' focus on the improvement of their peers' drafts.

First, Institutional Review Board (IRB) approval was obtained for the study, as required in U.S. institutions for the consent of human subjects. Forty-three undergraduates at a large, research-extensive university were recruited to participate. Students were enrolled in two sections of a foundational (L1)

2 By "error," this study refers to incorrect or garbled grammar and syntax, wrong word usage, incorrect punctuation, incorrect spelling, and other surface features to be described. It does not include aspects of style, such as informal register. The study also ignored cases in which an error (such as a fragment) appeared to be deliberate and in the writer's control.

writing course taught by two experienced writing instructors. The instructors were familiarized with Jing, a simple screencast program, that allowed for five-minute audio-visual commentaries (Anson, 2018; Anson et al., 2016). In the process used in this study, after reading a peer's draft, a student activated the Jing program and then talked about the paper while scrolling through and optionally highlighting bits of relevant text. The student could pause the recording and continue or discard it and start over. When the five minutes elapsed, the program prompted the user to upload the video to the learning management system associated with the course. After receiving and opening the screencast, the peer could then play and replay the audio-visual recording.

Students were trained in class to provide peer response on each other's drafts using the program. The process was integrated into students' coursework, which maintained authenticity and provided motivation. A brief video and written instructions were also made available, and students tested the program first to ensure functionality.

At the point when students had completed a full rough draft of one of the main (3-5 page) assignments in the course, they sent their draft electronically to the two other members of their peer-response group or their partner in the case of pairs. Students then opened and read a peer's draft, activated Jing, and provided audio-visual commentary. The teachers gave their students peer-response guides that helped to focus their attention on salient issues.

After opt-outs from the study and the removal of incomplete data or poor recordings, 56 screencasts were deemed usable, created by 36 students—18 in each teacher's class. Screencasts were professionally transcribed and cleaned of all non-content-based hesitations ("um," "uh," etc.) and obvious repetitions ("I . . . I read your paper"). The number of words in each transcript and the elapsed time of the screencast were then determined.

Students' drafts were coded for the presence of the most common errors as reported in research by Andrea Lunsford and Karen Lunsford (2008), which replicated an earlier study by Robert Connors and Andrea Lunsford (1988). In Connors and Lunsford's study, over 21,000 papers graded and commented on by 300 teachers in their first-year composition courses across the United States were collected. Trained assistants coded the papers for all errors present in the papers and all those identified by the instructors. Statistical analysis revealed the top 20 most often committed errors along with rates of instructor identification.

Because the original study was conducted before most students had access to word processors, Lunsford and Lunsford (2008) replicated the study to see if the patterns had changed over the previous 20 years. New IRB requirements severely restricted access to student work, yielding a smaller set of

1,826 graded papers from first-year writing courses at institutions across the United States. In a random stratified sample, Lunsford and Lunsford found interesting differences in the top 20 most often identified errors. Some of these differences appeared to be the result of word processing corrections or substitutions. For example, incorrect spelling moved down the ranks, while wrong word, faulty capitalization, and faulty hyphen use moved up.

Because it was important to study the extent to which students discussed errors that teachers are most concerned about, the list of the most often identified errors in the Lunsford and Lunsford corpus was used as the basis of analysis (see appendix). In addition to these, a 21st category, "other," captured seven further errors that were present in a number of papers but not cataloged in Lunsford and Lunsford's study. These errors are included in the appendix.

Students' drafts were read and coded for the presence of the errors. Fifteen percent of the drafts in the corpus were randomly selected for second-pass coding; agreement was .92. Next, transcripts of the screencasts were coded for every error students identified in their peers' papers. Only surface-level features such as grammar, punctuation, spelling, reference format, and usage or lexis (such as wrong word) were coded, in parallel with the errors previously identified in the drafts. Sub-coding captured whether any explanations were accurate or inaccurate. The following examples illustrate the codes and sub-codes.

> **Error correctly identified**
>
> Original sentence: Respondents were asked to make public post.
>
> Peer's comment: "Post" should be plural.
>
> **Correctly explained**
>
> Original sentence: This articles exemplifies uses for soybean protein . . . .
>
> Peer's comment: I think you can take the "s" off of "articles" right here, to make it singular so that it reads "This article . . . ."
>
> **Incorrectly explained** (errors not explained correctly or explained in an ambiguous or misleading way)
>
> Original sentence: "The same low status car was used, except was spray-painted to avoid recognition and a passenger was added to increase distractions."

> Peer's comment: "Was used, except was." I don't know if this whole sentence . . . I remember when I read it, like I felt like your tense was off or it just . . . you could have changed something.
>
> **Error incorrectly identified** (non-errors)
>
> Original sentence: Alcohol-related car accidents and injuries are a serious problem in the world today.
>
> Peer's comment: So in here [alcohol-related] you should take out the hyphen.

When transcripts were unclear (such as "I think this should be a comma," where "this" was ambiguous), the screencast was replayed to locate the reference. The vague item was then interpolated into the transcript (e.g., "I think this [semicolon] should be a comma"), and the item was coded.

General Results

Across the corpus of 36 drafts, students made 599 errors, for an average of 16.6 errors per paper. Table 15.1 shows the ordered frequency of the errors; #2-21 are from Lunsford and Lunsford (2008). Because errors could be made disproportionately by specific students, a test of within-writer frequency was conducted. None of the data showed a statistically significant effect that skewed the overall results, suggesting that the errors were distributed relatively evenly across the cohort.

Table 15.1. Rank-ordered errors in students' drafts

Rank order of error	Type of error	Lunsford & Lunsford rank	# of errors
1	Other (seven errors not in Lunsford and Lunsford's top 20)	n/a	127
2	Wrong word	1	102
3	Unnecessary comma	10	64
4	Missing comma in a compound sentence	12	59
5	Vague pronoun reference	8	51
6	Missing comma after introductory element	5	34
7	Missing or unnecessary hyphen	20	33
8	Missing word	6	24
9	Faulty sentence structure	13	22

Table 15.1. Rank-ordered errors in students' drafts (continued)

10	Mechanical error with a quotation	4	20
11	Unnecessary shift in verb tense	11	13
12	Unnecessary or missing apostrophe	9	13
13	Comma splice	14	13
14	Unnecessary or missing capitalization	7	10
15	Incomplete or missing documentation	3	9
16	Missing comma with a nonrestrictive element	16	6
17	Poorly integrated quotation	19	3
18	Sentence fragment	17	3
19	Lack of pronoun/antecedent agreement	15	2
20	Incorrect spelling	2	1
21	Fused (run-on) sentence	18	0

Several interesting observations arise from these results. First, of the errors categorized in Lunsford and Lunsford (2008), lexical errors (wrong word) were also the most frequent, and nearly double the next most frequent error (the use of an unnecessary comma). The following excerpt demonstrates a wrong-word error (the use of "that" for "who"):[3]

> Texting during class harms the student's learning capability and students *that* text during class are more likely to receive lower grades . . . . [italics added]

Second, while some errors generally matched the frequency of those in the Lunsford and Lunsford corpus, others did not, suggesting that the subjects did not always commit errors that teachers most often marked in the national sample. For example, spelling was the fifth most common error in Lunsford and Lunsford's study (dropping from first place in the earlier study), but came in almost last, with only one case in the entire corpus. Third, of 599 identified errors, 21 percent were not included in Lunsford and Lunsford's list, suggesting that in spite of their lower identification by teachers, these are still errors that students often commit.

As shown in Table 15.2, coding of screencasts revealed that students pointed to 105 (14%) of the 599 identified errors. Of those, 72 were correctly ex-

3 The distinction between "that" and "who" for inanimate objects vs. humans is rapidly blurring in casual speech and may eventually disappear. In this study, "trailing edge" errors—those increasingly accepted but not usually in formal prose—were counted as errors, whereas those that have almost entirely disappeared, such as split infinitives, were not.

plained and 23 were incorrectly explained, with the balance (10) simply noted but not explained. Students also identified 36 non-errors as errors, meaning that on average one out of every four errors was not an error.

Table 15.2. Error counts

Total errors in drafts	599
Number identified	105
Correctly explained	72
Incorrectly explained	23
Noted, not explained	10
Non-errors as errors	36

To this point, the data show that students do identify legitimate errors in their peers' drafts, but not much more than one in ten of all the errors present. It is not clear whether they are selective about which errors they identify or are unaware of the errors they overlook. Their explanations of the errors they do identify are correct about 75 percent of the time; but many are also incorrect or ambiguous, suggesting that they sometimes intuitively and correctly pick up on surface problems in their peers' drafts but do not know the explicit rules behind what they identify. Finally, they point to a small but not insignificant number of non-errors.

Distinctions Between Instructor's Classes

In addition to the overall results, some significant differences appeared in the two instructors' classes (they will be referred to pseudonymously as "Corrine" and "Emily"). Because students were all provided the same orientation to screencasting and were in sections of the same general course taught to the same learning outcomes, these differences were intriguing. For the purposes of this chapter, a comparison of the data from the classes of the two instructors will serve as the remaining focus of analysis.

First, in the two instructors' classes, both the number of words spoken and the elapsed time of the recordings differed significantly ($p < .01$). In Corrine's class, students' screencasts averaged 322 words (153 seconds of elapsed time), while in Emily's class, students' screencasts averaged 520 words (231 seconds of elapsed time). Many of the students in Emily's class used most or all of the five minutes provided in the Jing app, while many of Corrine's students used only half that amount. Second, further comparisons revealed that Corrine's students spoke more about surface aspects of the writing, while Emily's stu-

dents focused more on broader rhetorical and content-related concerns. As a result, Corrine's students had a higher error identification rate than Emily's students.

To further study these differences, the transcripts were subjected to an additional corpus analysis. In a previous study (Anson & Anson, 2017; Anson et al., forthcoming), nearly 500 writing teachers and scholars were administered a survey asking them to provide ten terms they associate with expert commentary on student writing and ten terms they associate with novice (student) commentary. Statistically, the most common expert terms were largely broad (global) terms for rhetorical and structural concerns: *audience*, *purpose*, *focus*, *clarity*, *organization*, *support*, and the like. The most common novice terms were mostly local, surface-level terms: *grammar*, *spelling*, *punctuation*, *flow*, *awkward*, *sentence*, and *comma*.

Applying the most frequently listed expert and novice terms from the survey study to the screencast transcripts yielded stark differences between Corrine and Emily's students, as shown in Figures 15.1 and 15.2. As shown in Figure 15.1, Emily's students far more often used terms associated with broader global issues in writing (*audience*, *purpose*, *readers*, *focus*, *development*, and *ideas)*, suggesting response to the ideational and interpersonal functions of writing (Halliday, 1973). In contrast (Figure 15.2), Corrine's students far more often used terms associated with local, textual functions (*sentence*, *word*, *grammar*, *comma*, *correct*).

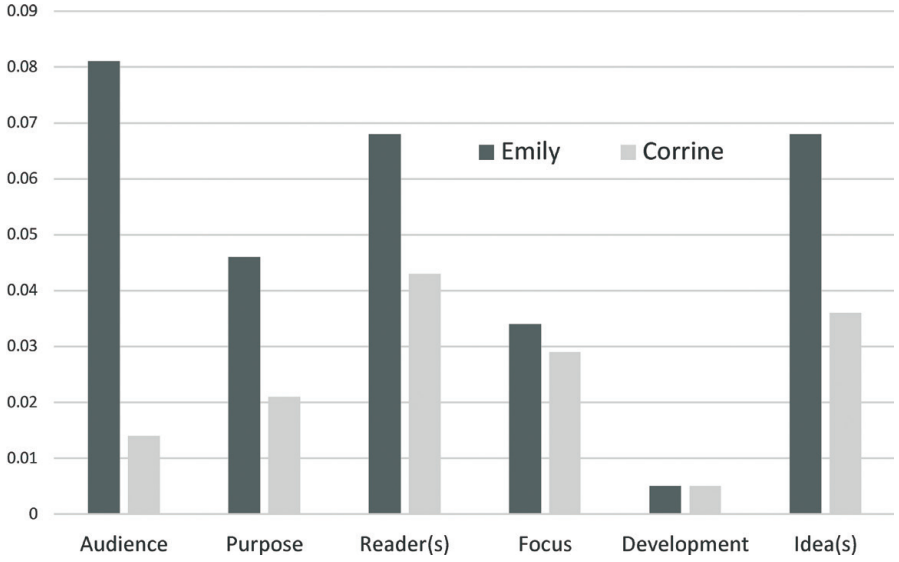

Figure 15.1 Global Terms Used Across the Screencast Corpus

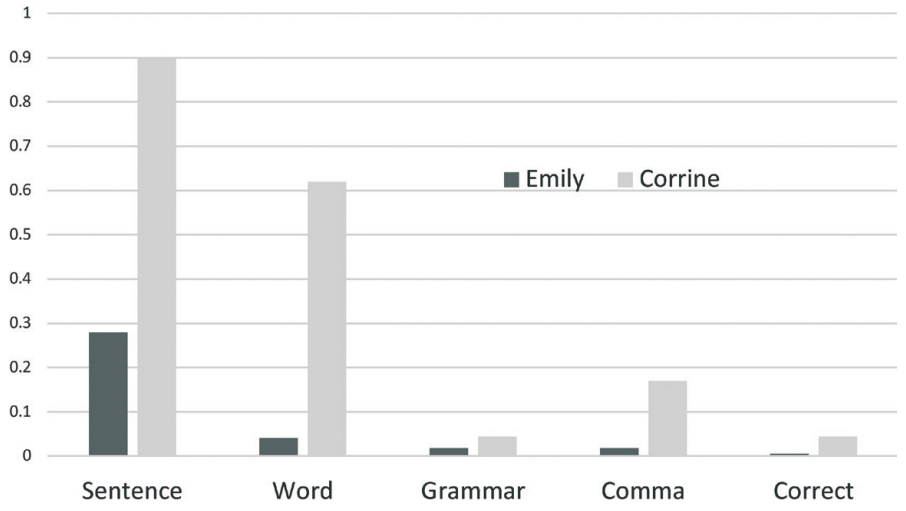

Figure 15.2 Local Terms Used Across the Screencast Corpus

The focus of the students' commentary was also related to the amount of time they spent commenting, with the more content-focused comments in Emily's class taking longer than the more error-focused comments in Corrine's class. In part, the differences in length of commentary can be intuitively explained based on the time it takes to comment on meaning-based issues compared to the identification of error (a possibility that could also explain why teachers are often pulled toward error identification when reading large amounts of student writing). Students focusing predominantly on error can move rapidly through a paper, calling attention to what to "fix," while students relating to the meaning of the paper must elaborate on their responses to their peers' ideas. "Drew," for example, fixed an error in a peer's draft in 15 words:

> Right here where you have "native to native," I think that's supposed to be hyphened.

In comparison, "Kelsey" shared a confusion, which took her far more time to explain:

> As a reader who doesn't really have much knowledge in this multiverse theory, I was kind of confused on like the second rule that you mentioned. The first rule that you state was something like a particle can exist in all possible locations at once. But then, here you kind of like said you were going to recap what we've learned so far, and so I didn't really know

> when this recap ended and like when you were going to introduce the next rule.

With the use of a modified constant-comparison method from grounded theory (Glaser & Strauss, 1967), the screencast transcripts were read, re-read, and compared in order to note broad tendencies in students' commentary. Because in most cases each student produced more than one transcript, it was possible to compare those pairs or sets to identify whether they shifted the nature and focus of their response across or between their peers' papers. After no such shifts were found, the descriptions were then refined into three response styles or dispositions that appeared to form the procedural knowledge students brought to the process of reading and commenting on their peers' papers.

The *Proofreader/Editor* focuses predominantly on the surface features of their peers' writing, identifying errors and making corrections. The Proofreader/Editor rarely becomes immersed in the content of the paper; any global comments are usually introductory or conclusory in nature ("Hi, Paul. I read your paper and I found some things to focus on," or "So that's about it. Good luck"). Some Proofreader/Editors are more tentative in their identification of error ("I'm not sure, but I think this should be 'is'"), while others take on the persona of an informed instructor ("So you should fix this apostrophe and make sure you look for dummy subjects").

The two peer responses by "Giselle," one of Corrine's students, offer a clear example of this style. Giselle's responses averaged 283 words (388 and 179), generally matching the average length of screencasts in Corrine's class (322 words). (Giselle found more errors to identify in the first peer's paper than the second, which explains the difference in the length of commentary.) Of the 388 words in Giselle's first peer review, 356 focused on surface errors. The remaining 34 words were introductory: "Hey [peer's name]. So I went through and read your paper and I would, just made some . . . highlighted words and suggestions that I would consider revising." Of the 179 words in Giselle's second peer response, 122 focused on surface errors. The remaining words were, as in her first response, introductory and conclusory ("But other than that, your paper is off to a good start"). Disregarding the opening and closing comments, Giselle spent 100 percent of her commentary making corrections: in the first paper, two tense corrections, two word choice corrections, the placement of a comma, the use of italics, a number needing to be spelled out, the use of quotation marks, and proper citation format (period inside quotation marks); in the second paper, numbers needing to be spelled out, the placement of a comma, and the use of a colon to introduce a series.

Thus, Giselle entirely ignored the content of her peers' papers, in spite of the interesting nature of the articles the peers wrote about (for the first peer, a study showing that students who start drinking alcohol before the age of 19 are more likely to engage in other risky behavior; for the second peer, a study investigating the effects of violent video games on adolescent aggression).

The *Interpreter*, in stark contrast, becomes immersed in the writer's meaning and in the rhetorical and structural ways it is being communicated. Commentary can include direct connections to the reviewer's own experience ("I also wanted a doctoral degree when I was a kid"), suggestions for clarifying a point ("I didn't see a relationship between the exam and the degree"), or questions about material needing clarification or elaboration ("Is there something important that people should know about it, does it affect people in any way, shape, or form?"). For the Interpreter, the surface nature of the text appears at this stage to be unimportant.

Two peer responses by "Erik," one of Emily's students, demonstrate this style of commentary. Erik's responses averaged 555 words (561 and 546), generally matching the average length of screencasts in Emily's class (520 words). Of the 555 words in Erik's first peer response, none focused on surface matters. For example, Erik said this about his first peer's draft, reflecting his reading and interpretation but also implying that the writer could clarify a point:

> In paragraph 2 you talked about a license examination and I have a question about it. I don't understand why you'd have the examination because I didn't see any relation between the exam and the degree.

Like his first peer response, 100 percent of the 546 words in Erik's second peer response focused on the peer's content—asking some questions, relating to the material, and making global suggestions, as in this comment:

> You talked about your personal interest in aerospace engineering or astrophysics but I don't see much personal experience like how a specific program or the discovery of NASA inspired you and excited you or which contribution they made.

Thus, for the Interpreter, the purpose of peer response is primarily to create a kind of readerly transaction with the writer, reacting to meaning and either implying or directly suggesting broad improvements in the content.

The *Comprehensive Reviewer* represents an amalgam of the two previous styles. The reviewer may focus first on meaning-related concerns and then, toward the end of the commentary, shift to smaller, local concerns. Alternatively, the response can move back and forth between global and local matters,

especially if the reviewer is working linearly through the draft and does not want to return to previous parts with a change in focus. This style of review is sometimes more preoccupied with providing feedback for revision than connecting personally with the draft, except by way of explaining how particular problems affect the reading process; but the focus on the interpersonal and ideational functions of language are still clear.

Two peer responses by "Chad," one of Emily's students, illustrate the style of the Comprehensive Reviewer. Chad's responses averaged 762 words (797 and 728), exceeding the average for Emily's students (520 words), and far more than for Corrine's students (322 words). Of the 797 words in Chad's first peer response, 255 focused on local surface issues. Chad spent considerable time sharing his reading of the draft, especially what the writer did effectively, as shown in this excerpt:

> The next paragraph, this is what I really learned a lot from, explaining all the little things about being an architect, you know, the long tests, and I think it's really interesting and it's a fun thing to read and I think it's a good way to explain your topic before giving us the argument on what the complaint . . . or, the problem is or the topic.

About two-thirds of the way through the response, Chad shifted his focus to smaller details:

> Just little minor things. I think "objectives" here should be singular. I'm not sure if that's what you intended or you made a mistake somewhere else. But I think the singular "objective" would fit better there. And then, I think you put "though" instead of "through," so that's just another thing I wanted to point out.

Similarly, of the 728 words in his second peer response, Chad spent 128 words pointing out local, surface errors and also made a more general admonition that the peer writer should take time to proofread the entire paper. Like his response to the first peer, he focused on the surface problems at two points during the recording, alternating between global and local concerns.

After the three response styles were created from the corpus, transcripts were placed into one of the three styles based on a predominance of features within each category. (For example, if a transcript overwhelmingly focused on ideational and interpersonal functions of the text but included only a single reference to an error, it was categorized as "Interpreter.") The results in Table 15.3 show the extent to which students of the two instructors fit the styles.

Table 15.3. Number of students fitting response styles, by teacher

Teacher	Proofreader/Editors	Interpreters	Comprehensive Reviewer
Corrine	15	0	3
Emily	1	4	13

Interpreting the Differences: The Role of Genre and Orientation

Because the students in the two courses were demographically similar—almost entirely first-year students entering from high school—and the courses were being taught in the same program to the same outcomes, the differences in the results must originate in something other than group differences. Further analysis of the contexts suggests two possible answers: the teachers' orientation toward peer response, and the assignment genre.

For many high school students, peer response is a new process when they reach a first-year college writing course. Wei Zhu (1995) reviews research that documents the difficulties students experience with peer response arising from a lack of knowledge about writing and how to provide effective response. What teachers do to orient students, therefore, can exert an important influence on how students behave when engaged in the process, a finding reported in Anson and Anson (2017) in the context of a digital peer-review system. Additionally, what students focus on and how they focus on it are shaped by their interpretations of the teachers' instructional ideology, conveyed through stated preferences and course materials. If a teacher frequently references or lectures about surface correctness, takes points off for errors in students' final drafts, or otherwise gives the impression that students must conform to standard edited English, students may behave in ways that avoid or mitigate the teachers' focus on these issues. If a teacher encourages students to connect with their peers' intended meanings or show how they are affected as readers, students may withhold a focus on surface details in favor of such content-related responses. In a study of how writing was used in a physical geography course, for example, Anna Rollins and Kristen Lillivis (2018) found that the inclusion of a vague grammar criterion on a rubric for essay exams was inappropriately influencing instructor response (and in some cases causing them to mis-identify errors), and drawing attention away from what they actually wanted to focus on. With 20 percent of the grade devoted to grammar, students in their study may have been distracted from a focus on demonstrating their knowledge of the material as they tried to avoid error, a conclusion reached in early research on the writing processes of underprepared students (Shaughnessy, 1977).

Artifacts from the teachers' courses show that Corrine was ideologically more focused on surface correctness, while Emily was more focused on rhetorical and meaning-making processes. (Corrine's preoccupation with error was often noted in the screencast comments. For example, one student remarked that "You used 'et al.' throughout your essay and I think [she] said to use 'and others.'") Corrine's peer-response questions included four elements, one being correctness, but even the element of "rhetorical purpose" was defined as "proper heading, etc." In contrast, Emily's materials emphasized meaning construction, the engagement and response of the reader, and rhetorical concepts such as the writer's stance.

In addition to these instructional influences—which permeate all courses where students write—the assignment's genre may have affected their peer responses. Emily's assignment asked students to write a proposal for a research project and explain their personal motivation for the inquiry. Corrine's assignment was an objective summary and analysis of an argument made in a research study of the student's choice. (In a later assignment, the students located an article that posed counterarguments to the first article's findings and put the two studies in dialogue with each other.) Thus, both the writer's and the responders' personal investment in each paper may have differed, with Emily's students drawn to connect with the research topic (as had the authors) and Corrine's students viewing the summary as more detached, therefore focusing more on the quality of the writing than the articles' content. This possible influence on the focus of peer review is important to consider in assignments across the curriculum, some of which leave less room for broader, more readerly interactions than others.

A partial model of the influences on students' peer response process helps to explain the extent to which they focus on error (see Figure 15.3). In this model, influences include writerly elements such as the reviewer's disposition toward peer response, their ability to read and critique others' drafts in progress, and their prior experience; instructional elements such as the teacher's beliefs about writing and the orientation of students to the process; textual elements such as the genre of the assignment and its constraints; and contextual elements (which were not studied here), including student rapport and the general climate of the classroom. Although a small number of students in both Corrine's and Emily's classes did not fit the pattern of the majority, it is likely that some combination of the elements in this model pushed one section more strongly toward error identification and the other away from it. When considered next to the general results of the study's focus on error, it appeared that Corrine's students more problematically focused on error because they did so erratically, without a sufficient fund of knowledge to identify or explain all errors correctly, in some cases helping their peers and in others perhaps confusing or misleading them, all while downplaying the role of meaning construction and interaction with the writer's ideas.

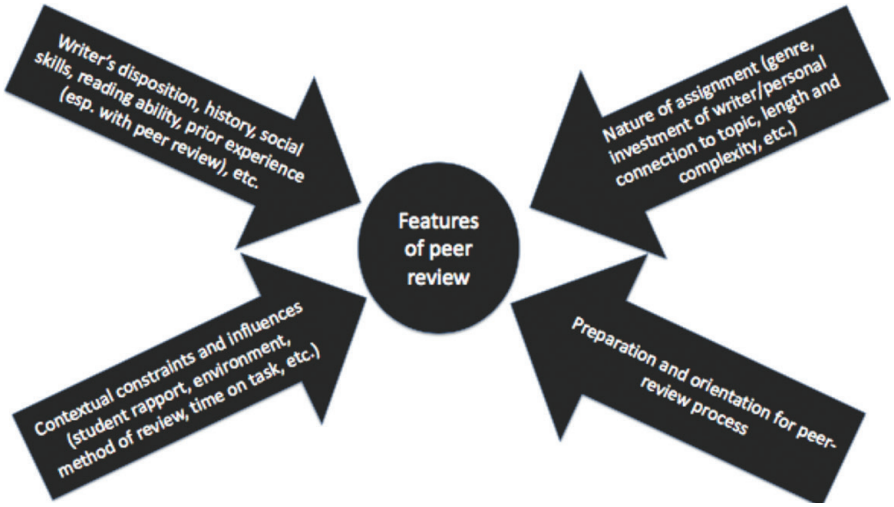

Figure 15.3. A partial model of influence on peer response.

Considered in the context of the three response styles previously described, this model suggests that students may *temporally construct* an approach to peer review depending on the various influences. A student who brings the disposition of a Proofreader/Editor into a writing class where there is a strong emphasis on response to meaning, especially when a writing assignment is designed to engage readers' responses, may lean toward the disposition of an Interpreter—in the same way that a highly skilled writer might respond to a colleague's draft in a proofreading or editing mode when asked to do so. (Otherwise, it would seem unlikely that most of the students in Emily's class brought different "stable" dispositions to the peer-review process than those in Corrine's class.) However, the nature and extent of this kind of flexibility among novice writers has yet to be studied fully. For example, experienced writers may have developed abilities to switch easily among different reading and response orientations depending on the task at hand, while novice writers may be more habituated to a certain orientation (such as Proofreader) from past experience or interpretation of the response task and find it difficult to shift perspectives without intervention and coaching.

Discussion and Implications

Among the issues this study raises, it is clear that the field of writing studies must more strongly confront its conflicts about the role of error in composition instruction and WAC/WID. If students are identifying errors during peer response, what are the effects of their incomplete or erroneous knowl-

edge on their peers' learning and revision? Does recognizing that students do not understand enough about grammar and other surface matters to respond effectively mean that they should be told to ignore all such matters in favor of response to meaning? If so, when and by whom are students' errors pointed out to them, and in what form, and with what advice? Although theoretically, writers learn to avoid error inductively, through exposure to written texts and through the writing process, this does not alleviate all errors, leaving them vulnerable to poor performance in other academic contexts and later embarrassment in their chosen professions.

At the same time, few in the field of writing studies would advocate a return to grammar instruction and a predominant focus on correctness. Some recent scholarship even advocates greater acceptance of nonstandard language or "code-meshing" in students' writing (see Young, 2011). But in the context of the attractiveness of peer response, it would also seem inadvisable to instruct students to provide more meaning-based response while leaving error detection and correction to teachers, because doing so could also subvert students' response to meaning with the message that correctness (the teacher's realm) counts more, and create a double standard. Helping students to become comprehensive reviewers may be one possible solution, but it does not alleviate the challenge of ensuring that students bring adequate linguistic knowledge to the task of responding to error in their peers' drafts.

This study also raises implications for the continued support of students' writing in courses across the curriculum. Instructors in such courses often disproportionately foreground surface error relative to other content-based concerns (Anson, 2015). Yet these same instructors are themselves often apprehensive about grammar, confessing an inability to name and describe it correctly (which they assume is the job of English departments and writing programs). Or they feel unable or untrained to "teach" writing (Plutsky & Wilson, 2001). Many WAC leaders and some educators within the disciplines therefore urge a focus on more general aspects of expression ("If something is garbled, have the student try to rephrase it") or urge instructors to ignore error in favor of engaging with the students' meaning (see, for example, Hansen and Hansen, 1995). But the paradox that faculty believe good writing is "correct writing" while they are also reticent to focus explicitly on correctness needs further inquiry and new approaches to faculty development.

Across the curriculum, more research on peer review is also needed to understand the role of error relative to the learning of course content. In a study comparing students' and teachers' responses and their effects on students' revisions in several disciplinary courses, Larry Beason (1993) found that attention to surface-level revisions was far more prominent than attention to

global/meaning revisions. Comparing his results to those of two similar studies, Beason found that all three groups "paid most attention to Surface-level Revisions, least to Global-meaning Revisions" (p. 415), perhaps because it may seem easier to "fix" simple errors than reconsider a complex thought or provide further evidence for an assertion. Eric Paulson et al. (2007) found in an eye-movement study of peer review that students did focus on errors in a student draft, as measured by their eye fixations. But when asked to respond to the writer, they gave general admonitions to avoid error rather than specific advice. As in Beason's study, students also tended to focus much of their attention on surface issues. These results are problematic when in most courses across the disciplines, content-focused comments designed to spur revision are usually considered more important for achieving the learning outcomes.

Finally, the students in this study were L1 speakers of English. Considerable new research in L2 contexts has been emerging but suggests a similar need to study the role of error and correctness. Carrie Chang's (2016) review of 103 studies of student peer review in L2 writing classrooms over two decades reveals a number of gaps in our knowledge, including the effects of training, the role of checklists or rubrics, the timing of feedback, the configuration of peer-review groups, the medium of response, and the effect of peers' comments on subsequent revision, including, in particular, "their improvement in local (e.g., grammar, vocabulary, punctuation) . . . writing areas" (p. 108). Complicating such inquiry is the fact that L1 and L2 learners may feel differently about a focus on grammar and surface correctness, partly because learning a second language in an academic setting usually involves the direct teaching of grammar and the conventions of discourse. Ironically, L2 learners may bring more explicit knowledge of grammatical principles to their peer reviews than L1 learners, although this knowledge may be partial or imperfect. Further research of peer review in courses across the disciplines that have mixed populations of international L2 students and L1 speakers of English (or at universities in non-Anglophone countries where English is the medium of instruction) could reveal such differences.

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Appendix: Top 20 Most Often Identified Errors (Lunsford & Lunsford, 2008)

1. Wrong word
2. Incorrect spelling
3. Incomplete or missing documentation
4. Mechanical error with a quotation
5. Missing comma after introductory element
6. Missing word
7. Unnecessary or missing capitalization

8. Vague pronoun reference
9. Unnecessary or missing apostrophe
10. Unnecessary comma
11. Unnecessary shift in verb tense
12. Missing comma in a compound sentence
13. Faulty sentence structure
14. Comma splice
15. Lack of pronoun/antecedent agreement
16. Missing comma with a nonrestrictive element
17. Sentence fragment
18. Fused (run-on) sentence
19. Poorly integrated quotation
20. Missing or unnecessary hyphen

Other errors identified in students' drafts:

- Subject-verb agreement
- Lack of parallelism
- Number spelled out/not spelled out
- Italics for quotation and vice versa (e.g., in titles)
- Dangling modifier
- Adjective/adverb confusion
- Article error