



Zak Lancaster and Andrea R. Olinger

Teaching Grammar-in-Context in College Writing Instruction: An Update on the Research Literature (WPA-CompPile Research Bibliographies, No. 24)

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Does grammar instruction help to improve students' writing? Should writing instructors focus on grammar in first-year composition or other university-level writing courses? These questions persist among writing professionals despite a long tradition of research-based conclusions that explicit grammar instruction has no effect or even a harmful effect on students' writing development (e.g., Braddock, Lloyd-Jones, and Schoer, 1963; Harris, 1962; Hillocks, 1986; McQuade, 1980; Wyse, 2001).

These conclusions, of course, have had considerable influence on writing scholars' views of grammar instruction. Some writing scholars, furthermore, have found theoretical backing for the case against grammar instruction in the linguist Stephen Krashen's argument (e.g., 1987) that subconscious acquisition of language-in-practice is more effective to bring about language development than explicit instruction (e.g., Freedman, 1993; Hartwell, 1985; Rose, 1983). For critiques of the methodologies and implicit definitions of grammar that guided the early studies reported on by Braddock et al. and Hillcocks, see, e.g., Brown, 2008, 2009a; Kolln, 1981; Kolln & Hancock, 2005; Weaver, 1996.

Nevertheless, the questions posed above still persist. An important reason for this persistence in addition, perhaps, to many instructors' sense that their students do benefit from instruction that heightens their awareness of the ways the details of language work in texts—is that many discussions of grammar and grammar teaching do not actually define what these terms mean, for example by articulating the range of language components and teaching strategies that would count as "teaching grammar." As Brown (2009a, p. 220) asks, "If ... a teacher explores usage with students by exploiting their knowledge as English speakers, is she or he teaching grammar or not?" Brown goes on to clarify that for those who believe that explicit grammar instruction has a negligible or harmful effect, such as Braddock, Lloyd-Jones, and Schoer (1963), explicit discussion about language in context "is not grammar instruction because grammar instruction is equated with textbook-based skill-and-drill teaching strategies" (p. 220). Brown's clarification is important to bear in mind when discussing and evaluating the effects of "grammar instruction" on students' development as writers. What counts as "grammar"? What counts as "teaching grammar"? What counts as "writing development"?

To begin answering these slippery questions, categories of types of grammar may be helpful. Martin and Rothery (1993) usefully distinguish between (in their terms) traditional grammar,

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formal grammar, and functional grammar. The first category, *traditional grammar*, refers roughly to "school grammar" and overlaps with a prescriptive orientation to language instruction focused on "correctness" rather than on meanings and choices. *Formal grammar*, in contrast, refers to the 20th-century scientific study of the structural principles that govern humans' language competence, as seen most famously in the work of Noam Chomsky. As a descriptive science, formal grammar is not interested in questions of "correctness" or pedagogy but rather in principles of grammatical "acceptability." *Functional grammar* refers to an alternative development in modern linguistics that seeks to understand grammatical constructions in terms of their meaning-making functions in social contexts. (The authors refer to the grammatical theory of M.A.K. Halliday and others in systemic functional linguistics [SFL], though there are other traditions of functional grammar.)

In addition to Martin and Rothery's distinctions, two further classifications that are important to note are *rhetorical grammar* and *discourse grammar*. *Rhetorical grammar* (see, e.g., Kolln & Gray, 2012; Micciche, 2004; Rossen-Knill & Bakhmetyeva, 2011) aligns with functional grammar in its focus on meanings, purposes, and contexts, as well as in its basic view of language as semiotic resources for making rhetorical grammar is the notion of *discourse grammar*, which explores how the details of language (words, phrases, and clauses) operate across sentences and utterances to create texture and cohesion, in addition to other meanings like negotiation of attitudes. To be clear, functional, rhetorical, and discourse grammar all describe approaches to language study focused on language use in discourse and on the interrelations between form and meaning. Such functional grammars (broadly understood) are especially useful, then, in the context of student writing instruction, as noted by Martin and Rothery. (There are, of course, other grammar classifications that can be made, e.g., Construction Grammar, Transformational Grammar, and more. We have sketched out the categories here which we view as most relevant for writing instruction.)

Functional grammars participate in post-Chomsky and post-Krashen developments in linguistics (see, for example, Biber, Johansson, Leech, Conrad, and Finegan, 1999; Celce-Murcia & Larsen-Freeman, 1999; Kolln & Gray, 2009; Halliday, 1994; Odlin, 1994; Quirk, Greenbaum, Leech, & Svartvik, 1985; and Swan, 2005). Functional grammars suggest that an explicit focus on language can facilitate advanced language development (see, for example, Ellis, 1994; Nassaji & Fotos, 2004; Williams & Colomb, 1993; and emergentist views of language learning such as Ellis & Larsen-Freeman, 2006). That is, explicit knowledge of grammar may assist learners to notice consciously how linguistic resources build meanings in contexts. For writing scholars, this kind of explicit or "meta-linguistic" knowledge of language use is related to the current literature on meta-reflection or meta-cognition in writing and how these processes facilitate students' transfer of writing knowledge (see also Rossen-Knill, 2006).

The Grammar-in-Context Bibliography

In this bibliography, we use the term "grammar-in-context" to denote pedagogy that connects some kind of functionally oriented grammar instruction to students' writing and/or reading. The studies we annotate thus answer the following questions: Is it beneficial in the context of writing courses to draw students' attention to the specific details of language use, at the levels of

word/phrase and clause? If so, what are the benefits? And is a specific analytic terminology or grammatical "metalanguage" useful for faculty and students?

Overview of Studies. The studies come from a variety of research traditions and conversations because, to date, few exist that are based in a functionally oriented understanding of grammar. Indeed, Myhill, Jones, Lines, and Watson (2012) assert that their study "represents the first large-scale study in any country of the benefits or otherwise of teaching grammar within a purposeful context in writing" (p. 161). For ease of reference, we have grouped these studies by their purported effects on students' learning. Our groupings are the following: (1) effects on students' discourse-based metalinguistic awareness; (2) effects on students' sociolinguistics-based metalinguistic awareness; (3) effects on writing quality in general; (4) effects on writing quality via sentence-combining (a specialized subset); and (5) effects from corrective written feedback on students' drafts. Several studies claim effects on both textual quality and metalinguistic awareness or fit into multiple categories, and we note those studies below. We also explain our reasons for including studies in these categories.

Study Populations. Most of the studies involve postsecondary students or adults, but we include studies of secondary students when they seemed especially relevant (Brown, 2008; Godley & Minnici, 2008; Kanellas et al., 1998; Keen, 2004; Myhill et al., 2012; Spycher, 2007). We include studies of grammar instruction in both first language (L1) and second-language (L2) contexts for a couple of reasons. One is simply that there are more studies of grammar instruction focused on L2 writers, a situation that is underscored by Myhill et al.'s (2012) point that their study with L1 writers is the first of its kind. A second reason we include both is that metalinguistic awareness instruction appears to benefit all writers, especially writers at advanced levels of literacy. Although we do not mean to flatten distinctions between L1 and L2 students or deny the complexity of second language acquisition, there are clear associations to be made between L1 and L2 students' processes of developing academic literacies in the context of college writing instruction. In general, the student populations that are studied in the papers reviewed below include EFL students (Sengupta, 1999), ESL students (Bitchener & Koch, 2010; Cheng, 2008; Sheen, 2007; Spycher, 2007), Black English speakers (Taylor, 1989), classes consisting of "native-speakers" (Cortes, 2006; Cheng & Steffensen, 1996), and classes with a mix of students for whom English is a first or additional language (Myhill et al., 2012; Keen, 2004; Kanellas, Carifio, & Dagostino, 1998; Wolfe, Britt, & Poe, 2011).

Study Selection and Findings. Some of these studies show that grammar-in-context instruction improves the quality of writing, variously operationalized (Cheng & Steffensen, 1996; Keen, 2004; Lee, 2002; Myhill et al., 2012; Spycher, 2007; Wolfe et al., 2012). Many also showed gains in students' metalinguistic awareness—sometimes in tandem with improved writing quality (Cheng & Steffenson, 1996; Lee, 2002; Myhill et al., 2012; Spycher, 2007) and sometimes by itself (Cortes, 2006; Cheng, 2008; Sengupta, 1999). Some research on undergraduate and graduate students' academic writing suggests that students who command a specific "metalanguage" for talking and thinking about texts are better able to engage in reflection on their own rhetorical choices, for example on their use of metadiscourse markers (Cheng & Steffensen, 1996) and rhetorical moves (Cheng, 2008). In contrast to internalized or tacit knowledge of language and discourse, it may be, as Myhill (2010) explains, that explicit knowledge of the ways specific textual features work and interrelate with socially valued

meanings is "more cognitively accessible for reflection and decision-making, and may therefore be a powerful enabling tool for writers tackling the cognitively complex task of writing" (p. 141).

In line with the studies on the value of a grammatical metalanguage, we include a few recent studies of the effects of grammar correction with metalinguistic information on ESL/EFL adult or postsecondary students' written accuracy in English. The studies we annotate (Bitchener & Koch, 2010; Sheen, 2007), which focus on definite and indefinite articles, show that students who receive grammar feedback with metalinguistic commentary, as opposed to without the commentary, make fewer errors on delayed posttests. These studies are clearly much more narrowly focused, and their assumptions about correctness and the stability and "masterability" of languages are problematic (see, e.g., Horner, Lu, Royster, & Trimbur, 2011; see also Blommaert, 2010). However, we included these studies as evidence that some metalinguistic information can help students exercise greater control over one or more aspects of their language use. Although accuracy in article use is certainly different from heightened awareness of, say, ways to shift the emphasis of a sentence, we invite future researchers to explore the link between different kinds of metalinguistic awareness. For those interested in learning more about written corrective feedback, we recommend Bitchener and Ferris (2012) and Ferris' (2014) student handbook.

We also felt we would be remiss to exclude studies of sentence-combining, although usually they require little to no explicit knowledge of grammatical terminology and are based in Chomskyan understandings of grammar. Such studies have been conducted since the 1960s (Hillocks, 1986), and even recent reviews of adolescent writing research have found sentence-combining more effective than "traditional grammar" in improving the quality and accuracy of students' writing (Andrews et al., 2006; Graham & Perin, 2007; see Connors, 2000 for a discussion of the decline of sentence-based pedagogies in composition and rhetoric). During its heyday, sentencecombining instruction was found to increase college students' "syntactic maturity" or "complexity" (e.g., Daiker, Kerek, & Morenberg, 1978; Olson, 1981; Smith & Combs, 1980) and even overall writing quality (e.g., Hake & Williams, 1979; Morenberg, Daiker, & Kerek, 1978). Teachers and researchers felt that having students combine "kernel" sentences into longer sentences, whether any way they wanted ("open exercises") or whether directed to use a particular syntactic structure ("cued exercises"), increased the range of options they had when composing their own sentences. It should be noted that "Syntactic maturity" or "complexity" does not necessarily entail writing of higher quality; rather, it is based on research by Hunt (e.g., 1965, 1970) that links T-unit length with developmental level, using Atlantic and Harper's articles as the peak of "mature." (A T-unit is a clause with all of its accompanying modifiers.) "Maturity" or "complexity" has been measured by a range of factors, including words per clause, words per T-unit, and clauses per T-unit (for critiques, see Faigley, 1980, and Williams, 1979.)

Most of these studies do not align with our understanding of grammar-in-context. In them, students do not use sentence-combining to revise their own writing, and the content of the tasks is unrelated to what they are reading or writing about. Essentially, this close attention to language is not tied to any authentic rhetorical context. Also, measures of "syntactic maturity" or "complexity" relying on research by Hunt (1965, 1970) have been shown to be problematic (see, e.g., Faigley, 1980; O'Donnell, 1976).

The three sentence-combining studies we annotate below, however, escape these limitations. Keen's (2004) intervention has students apply the sentence-combining techniques to a portion of their own writing, to try several different versions, and then discuss which one is the best and why. And both Kanellas et al. (1996) and Wolfe et al. (2011) develope sentence-combining exercises based on content the students had to read and/or write—high school biology and engineering IMRaD reports, respectively. In fact, Wolfe et al. call their exercises "rhetorical sentence combining" and "rhetorical pattern practice" to emphasize the way the instructional materials connect "linguistic form to rhetorical meaning making" (p. 125).

Finally, we included a few studies of innovative curricula that draw on a variety of approaches from applied linguistics and sociolinguistics to engage students in the study of dialects and registers, contrastive analysis of different varieties of English, discussion of language ideologies, and other topics (Brown, 2008; Godley & Minnici, 2008; Taylor, 1989). The researchers find that students left the courses or the units with increased metalinguistic awareness and a more nuanced understanding of the relationship between language and meaning. A caveat: Taylor's (1989) "informal experiment" may be seen as "accomodationist" in that the author aims to reduce the number of Black English features in students' writing. We included it nonetheless because of the author's interest in promoting bidialectalism in addition to accuracy in standard written English, and because her research does show—like the ESL/EFL error correction studies mentioned above—that heightened awareness of language use through some kind of intervention can positively influence language performance (in these cases, accuracy in Standard Edited English).

In sum, this diverse group of studies all examined the effects of explicit language instruction on students' metalinguistic knowledge or written texts or both. Through this annotated bibliography, we hope to help WPAs and teachers envision and justify a place in their curriculum for grammarin-context instruction. We also hope to inspire researchers to further examine the nature of metalinguistic awareness in writing.

A Brief Note on Pedagogy

Some of the researchers whose studies we annotate have also written about their interventions in more detail:

- In a 2013 article for the journal *Literacy*, Myhill, Jones, Watson, and Lines (2013) describe the rationale behind their intervention and also give some examples of different units.
- Brown's (2009b) textbook, *In Other Words: Lessons on Grammar, Code-Switching, and Academic Writing*, presents the curriculum he describes in his dissertation study.
- The rich IMRaD sentence-combining and pattern practice materials that Wolfe et al. developed are available online at http://louisville.edu/faculty/jlwolf02/writing-about-data.

In addition to the website of NCTE's Assembly for the Teaching of English Grammar (ATEG) (http://www.ateg.org/), a few new books on teaching grammar-in-context are the following:

- The chapter on "Rhetorical Grammar" in Deborah F. Rossen-Knill and Tatyana Bakhmetyeva's (2011) book, *Including Students in Academic Conversations: Principles and Strategies of Theme-Based Writing Courses Across the Disciplines*, contains lesson plans that integrate grammar and writing from teachers and researchers who have been working in this area for several decades, including Cornelia Paraskevas, Deborah Rossen-Knill, Craig Hancock, and Rei Noguchi.
- A new book by Vershawn Ashanti Young and colleagues (2013), *Other people's English: Code meshing, code switching, and African American literacy,* argues for the value of code-meshing and provides lessons and activities.
- Nora Bacon's (2013) *The Well Crafted Sentence: A Writer's Guide to Style* links grammar and style.
- Paul Butler's textbook on style, *How So? The Writer's Style*, will be published by Oxford University Press in 2015.

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Annotated Bibliography: Teaching Grammar-in-Context in College Writing Instruction

Part 1: Effects on Discourse-Based Metalinguistic Awareness
Part 2: Effects on Sociolinguistics-Based Metalinguistic Awareness
Part 3: Effects on Writing Quality (General)
Part 4: Effects on Writing Quality (via Sentence-Combining)
Part 5: Effects of Written Corrective Feedback

Part 1: Effects on Discourse-Based Metalinguistic Awareness

Cheng, An

Analyzing genre exemplars in preparation for writing: The case of an L2 graduate student in the ESP genre-based instructional framework of academic literacy

Applied Linguistics 29.1 (2008), 50-71

In this article, Cheng examines how one doctoral student in engineering was able to develop an increased rhetorical understanding of genre during an English for Specific Purposes (ESP)-based writing course that emphasized textual analysis of genre exemplars. The main linguistic construct treated in the course was that of a rhetorical "move" (Swales, 1990) in addition to various language categories associated with moves, as discussed in Swales & Feak's (2004) textbook. Cheng's focal student, Fengchen (a pseudonym), conducted several in-depth move analyses of research articles from his field. Cheng examined Fengchen's analyses to track the development of his rhetorical understanding of the choices writers were making, both in terms of linguistic features and move structure. In addition to Fengchen move analyses, Cheng's data includes text-based interviews, Fengchen's beginning-of-term literacy narrative, and his needs analysis survey.

Qualitative analysis of Fengchen's work shows that the genre analysis activities helped him move from a static understanding of genre, one whereby genres are seen as "formulas," to a more rhetorically oriented view. Specifically, analysis shows Fengchen's increased sensitivity to (1) options that are available to writers for crafting a research space (as opposed to adherence to pre-fabricated templates), (2) predictions about how writers would organize various moves in a text, and (3) reflections on how he himself would have organized material if he were the writer. Fengchen characterized his own new way of thinking about writing as "deep thinking" about genre, and Cheng argues that it reveals increased "writerly engagement with text." This study points to the value of teaching students explicitly how to analyze the details of genre samples in a way that connects language choice to rhetorical purpose.

KEYWORDS: data, L2, academic, literacy, grammar, ESP, EAP, ESL, graduate, engineering-writing, genre-analysis, audience-awareness

Cortes, Viviana

Teaching lexical bundles in the disciplines: An example from a writing intensive history class

Linguistics and Education 17 (2006), 391-406

In this study, Viviana Cortes explores the effects of explicit instruction in use of "lexical bundles," or multi-word lexicogrammatical formulas like *from the perspective of, on the one hand*, and *the extent to which*. The context for the intervention was an upper-level writing-intensive course in American history. The students were in their third or fourth year, all native speakers of English.

First, using corpus linguistic software to examine published articles from journals of American History, Cortes provides evidence that longer formulas such as those listed above (four word ones) are more frequently used in published texts written by expert scholars in history than they are in undergraduate students' writing. She developed a list of target lexical bundles that are salient to history discourse. Working with the course professor, Cortes then delivered multiple "micro-lessons" focused on teaching the bundles explicitly. Students worked in pairs to analyze functions of particular expression and then practice applying them. She then collected sets of response papers by students at various stages of the course in order to examine whether students used more of the target bundles in their writing. Students submitted response papers prior to the first lesson, after micro-lesson three, and after micro-lesson five.

Cortes found that the intervention had more effects on raising students' awareness of lexical bundles—"their use, frequency, and function" (p. 389)— than on their improved use in their own writing. In her words, "it may be that in the short term, explicit instruction on lexical bundles can only be expected to raise students' awareness of their frequency and functions, and that gains in active use are a much longer-term project" (p. 401). This finding echoes findings from Sheen and others about the long-term effects of language pedagogy that emphasizes metalinguistic knowledge and awareness-raising. Cortes concedes that different instructional activities may have assisted students to use the bundles more in their own writing, including having students investigate for themselves how the bundles are used.

KEYWORDS: data, WID, history-writing, lexicogrammar, lexicon, metalanguage, intensive, lexical bundle, grammar, pedagogy

Sengupta, Sima

Rhetorical consciousness raising in the L2 reading classroom

Journal of Second Language Writing 8.3 (1999), 291-319

Sengupta investigated the impact of teaching metadiscourse for rhetorical consciousnessraising among fifteen English L2 students at a university in Hong Kong. The intervention involved explicit teaching of linguistic and rhetorical resources that can be used to create "reader-friendly" texts. These included signaling devices (e.g., *We begin with, We have shown that*), structural components like headings and subheadings, and specific textual features of introductions and conclusions like explicit purpose statements and reiterations. Sengupta's instruction included direct teaching of textual features as well as facilitating discussions of rhetorical features in assigned readings. The data included transcripts of 147 in-class discussion tasks, interviews with six students focused on their self-perceptions of their reading abilities as a result of instruction, and 31 journals entries in which students reflected on assigned readings in light of the focus on reader-friendliness. Additional data included nine texts produced by students in the course. The study was guided by three primary questions: how the participants "define reader-friendly texts as readers" (p. 294); how their increasing understanding of the features of reader-friendly texts influences their reading capacities; and how their increasing understanding influences their writing capacities.

Sengupta found that the instruction enhanced students' rhetorical awareness. Their discussion comments, for instance, reflected awareness of language choices not as inherently "good" or "bad" but as good or bad in relation to their role in engaging and guiding the reader. She also found that students perceived that their reading abilities improved, as revealed in comments about their abilities to better understand the overall argument of a text, identify main points in readings, and remember and understand more from the reading. In describing these gains, students took up the language of the target linguistic features, unprompted by the author. In contrast, in terms of writing performance, Sengupta found that the students infrequently made connections to their writing processes. The intervention had little effect on students' textual production, as their texts revealed only minimal use of the target features. Interestingly, the students were able to see that their minimal use of these features had to do with the nature of student genres versus published research articles.

The author concludes that direct instruction in metadiscoursal features can be useful for raising students' awareness of how to produce reader friendly texts but that this awareness may not easily "transfer across modes beyond a reflective level" (308). The author concedes that the students in her study may not have had adequate time to transfer target features from reflection to production and that more research is needed that tracks this kind of transfer over time.

KEYWORDS: ESL, L2, rhetoric, pedagogy, data, metadiscourse, EFL, EAP, Hong Kong, metalanguage, grammar, audience-awareness, teacher-research, gramma

Part 2: Effects on Sociolinguistics-Based Metalinguistic Awareness

Brown, David West

Curricular approaches to linguistic diversity: Code-switching, register-shifting and academic Language. Ph.D. dissertation

Ann Arbor, MI: University of Michigan (2008)

In this dissertation study, Brown developed, and examined the implementation of, a grammar-focused curriculum in one English class at a charter high school in a predominately African American school district. Results of the study show increased metalinguistic awareness on the part of both the teacher and students. The curriculum drew on sociolinguistic and SFL orientations to grammar, introducing the concepts of dialect, register,

academic language, and code-switching, as well as SFL analytic constructs like theme/rheme (or topic/comment), given/new information, nominalizations, and conjunctive resources. It furthermore used the techniques of contrastive analysis to assist students to compare the grammatical patterns of "Standard" English (StE) with African American English (AAE). The class consisted of twelve students, most of whom had reading scores below grade level (significantly so in some cases). Brown assisted the teacher to infuse the designed curriculum within the existing curriculum, which was focused on literature and writing about literature. Three data sources were collected: interviews with the teacher and students; student writing samples from before and after the implementation of the curriculum; and videotapes of the classroom as the curriculum was being taught.

Brown shows how the curriculum helped students to engage closely with the details of language while having critical discussions about prejudices against AAE and those who speak it. Engaging closely with grammar also prompted students to learn about sociolinguistic content. They learned about dialects, registers, and code-switching, in so doing moving beyond abstract and largely unhelpful concepts like "formal" and "informal" language. In terms of their academic language development, students gained metalinguistic awareness by identifying and naming features of academic registers, especially the ways that grammar resources are used differently in this register. Brown specifically recommends that, when working with bi-dialectical students who do not yet control resources of academic language, teachers can use instructional activities designed to have students practice codeswitching.

KEYWORDS: data, diversity, pedagogy, grammar, contrastive-analysis, code-switching, AAVE, secondary-school, systemic functional linguistics, register, bidialectal, metalinguistic, metalanguage, grammar, curriculum

Godley, Amanda J.; Angela Minnici

Critical language pedagogy in an urban high school English class

Urban Education 43.3 (2008), 319-346

Although there has been much research and theory on the importance of critical language and literacy instruction for students who speak stigmatized dialects, Godley and Minneci remark that researchers have given "minimal attention to the systematic study of actual classroom practice" (p. 338). Responding to this need, they describe students' responses to a week-long "critical language pedagogy" unit in three 10th-grade English classes, in which all students (largely African American) spoke AAVE. Godley taught the unit, which asked students to reflect on and interrogate language ideologies and language use by, e.g., discussing sociolinguistic topics in the documentary *American Tongues* and translating sentences in different varieties of English. The data consisted of recordings of class discussions, field notes, students' written reflections on the unit, questionnaires students completed at the beginning and end of the school year, and interviews with 11 students at the end of the school year, which was four months after the unit. Based on students' interviews and questionnaires, the authors conclude that students developed "more positive, detailed, and reflective understandings of their own dialect use that were maintained over time" (p. 338). Students

became more conscious of their linguistic repertoire, came to view language variation and code-switching as "natural and desirable" (p. 337), and questioned the assumption that some varieties are superior. Given that students' attitudes changed "dramatically and longitudinally after only a week of focused instruction" (p. 338), the researchers argue that this kind of instruction is a valuable investment for secondary English language arts classrooms.

KEYWORDS: data, AAVE, SWE, critical pedagogy, secondary-school, code-switching, sociolinguistics, metalinguistic, metalanguage, grammar, urban, high-school

Taylor, Hanni U.

Standard English, Black English, and bidialectalism: A controversy

New York: Peter Lang (1989)

Taylor's book describes the theories, research, and motivations behind, curriculum for, and effects of "Project Bidialectalism," a group she facilitated for black students at Aurora University in Illinois. She aims for the book to "demonstrate the possibility of black students' achievement in a predominately white college environment"; "provide writing teachers, support professionals, and students with a tentative version of applicable techniques and attitudinal adjustments that proved to be successful enough to make a difference"; and "convince my readers of the need for further exploration and expansion of my tentative approaches" (pp. 26-27). The final two chapters report on her "informal experiment" (p. 100), in which she worked with Black students from inner-city Chicago to promote appreciation of the rule-governed nature of both dialects and "increase the expression of standard English features and decrease interfering black English features in writing" (p. 101).

Twenty Black students volunteered to participate in the weekly meetings over the course of an 11-week term; they were divided into the experimental and control groups based on their schedules. Her curriculum combined methods from contrastive analysis, audiolingualism, and "counseling-learning" with an "attitude of ethnosensitivity" (p. 27). All students wrote an essay as a pre-test and then completed a "final writing project." Both the control and experimental groups read, discussed, and wrote responses to essays and plays about Black and White cultures (e.g., Lorraine Hansberry's Raisin in the Sun and Edward Albee's Zoo Story), but the experimental group also did extensive contrastive analysis and audio-lingual exercises with Black English and Standard English, whereas the control group "followed closely traditional English Department techniques" (p. 148). (Detailed information about the control group, along with a number of other aspects of her research, is not provided.) Taylor and a colleague coded the pre-test and final writing project for features of Black English in 10 categories of interference. She found that the number of Black English features in the experimental group's writing was reduced by 59.3%, from 54 features to 22 features (with the majority of changes occurring especially with the use of third person singular –s and with hypercorrection), and the number of Black English features in the control group's writing increased slightly by 8.5%, from 59 to 64 features. Also, through interviews and problem-posing discussions, she found that her students were not aware of the black English features in their writing and wanted to "improve standard English features for 'upward mobility'" while maintaining "some language' and culture" (p. 150). Taylor

concludes that "a sequenced curriculum may lead to a reduction of black English features" (p. 150) and calls for more research and teacher-training on bidialectalism and working with bicultural students.

KEYWORDS: SWE, AAVE, controversial, data, AAVE, bidialectal, contrastive-analysis, pre-post, metalinguistic, grammar, pedagogy

Part 3: Effects on Writing Quality (General)

Cheng, Xiaoguan; Margeret S. Steffensen

Metadiscourse: A technique for improving student writing

Research in the Teaching of English 30.2 (1996), 149-181

Xiaoguan Cheng and Margeret S. Steffensen investigated whether explicit instruction in theory and use of metadiscourse would assist first-year undergraduate writers to produce more "reader friendly" texts. As the authors explain, metadiscourse can be divided into resources that have primarily "textual" functions like logical connectors and stage markers (e.g., *therefore*; *first*; *next*) and those that have primarily "interpersonal" functions like hedges (e.g., *perhaps*) and certainty markers (e.g., *certainly*). Using statistical analysis of scores on pre- and post-instruction writing samples, the authors found that students who received explicit instruction in metadiscourse received higher scores on their essays and used these resources more effectively in their writing.

The participants included two first-year writing courses at a large Midwestern university consisting of all native-speaker students: the Control Class (CC) and the Experimental Class (EC) were taught by the same instructor. The design of the two classes was the same except that in the EC the reading was supplemented with theoretical articles on text analysis and metadiscourse, and students practiced identifying use and misuse of metadiscourse items in others' writing. Two data sets were collected: (1) in-class essays written at the beginning and end of the term and (2) regular drafts of a position paper written before and after the instruction on metadicourse. The essays written by the EC group received significantly higher scores from the three evaluators, who were experienced composition instructors and were uninformed about the experimental intervention. In addition, comparative text analysis of the EC and CC essays revealed that the EC essays used the following: a wider variety of metadiscourse makers; more *textual* metadiscourse markers to guide the reader through the underlying organization of their texts; a greater number of attributors (e.g., According to) to signal the source of their arguments; fewer interpersonal markers, specifically hedges; and fewer "errors" or misuse of metadiscourse markers (e.g., In turn instead of In contrast).

The authors suggest that first-year writing students would benefit from explicit instruction in (a) the theory of metadiscourse and how it relates to the writer's rhetorical goals and (b) how to use varied kinds of metadiscourse markers to create reader effects.

KEYWORDS: metadiscourse, FYC, pedagogy, contrast-group, pre-post, grading, data, gain, student-writing, audience-awareness, coherence, metalanguage, grammar

Lee, Icy

Teaching coherence to ESL students: A classroom inquiry

Journal of Second Language Writing 11.2 (2002), 135-159

With "coherence" typically seen as an "abstract and fuzzy" topic "difficult to teach and learn" (p. 135), Lee aimed to operationalize "coherence" in concrete terms useful for students. She then studied the effects of teaching textual coherence on first-year Hong Kong university students' written performance, awareness of coherence, and attitudes about it. Viewing coherence as both belonging to texts and co-constructed by readers, and drawing on functional linguistic research, Lee operationalizes coherence in terms of five features (p. 139): (1) "connectivity of the surface text" via cohesive devices; (2) information structure and topical development; (3) "connectivity of the underlying content" achieved through signaling relations between propositions; (4) a "macrostructure" appropriate to the purpose and context; and (5) use of metadiscoursal features for guiding the reader.

Lee then developed a 42-hour series of units to be integrated into a 112-hour English communication skills course that she taught for 16 college students for whom Cantonese is a first language and who had 16-17 years of exposure to English. After Lee introduced each of the five coherence topics listed above, students practiced awareness-raising tasks. These involved, for example, analyzing the cohesive features in a text and making revisions to improve the text's cohesion. Students were then asked to apply this particular aspect of coherence in their essay revisions. Students wrote multiple drafts of four essays, with a draft always due after each coherence topic. Four students also completed six think-aloud protocols (one or two per essay) and participated in a group interview, and the whole class was surveyed about the intervention.

Lee and several independent raters analyzed the coherence of students' drafts in two different ways: "topical structure analysis" (counting the number of sentence topics and comparing them to the number of sentences; the more sentences with the same sentence topic, the more coherent) and a Coherence Scoring Guide (a holistic score). Lee found that the coherence did improve from the first to the final draft of the majority of the essays. For the four focal students, 75% of their final drafts (12 of 16 drafts) had more sentences per sentence topic than did their first drafts; in addition, following the Coherence Scoring Guide, raters judged that 87.5% of the final drafts (14 out of 16 drafts) had stronger coherence than did the first drafts.

To understand whether students refined their awareness of coherence, Lee transcribed and coded the four students' think-aloud protocols. The percentage of comments about coherence did not increase from the first protocol to the last, but students did mention coherence issues between 23.5-46.5% of the time. Also, for each particular aspect of coherence, there was an increase in comments about that aspect in the protocols following that particular instructional unit.

Lee concludes that "the lessons on coherence have succeeded, to some extent, in providing students with strategies for composing text in addition to 'grammar' (p. 152). Lee suggests that instruction could have been more "useful" had students been shown "how coherence would function differently in different genres" (p. 153). She also regrets that the

essay topics were not related to the cohesion material students were reading about and revising. Overall, however, Lee finds promise in the ability of instruction to increase the coherence of students' writing and students' awareness of coherence-creating features.

KEYWORDS: ESL, pedagogy, coherence, data, classroom-research, Hong Kong, cohesion, given-new, think-aloud, metalanguage, drafting

Myhill, Debra A.; Susan M. Jones; Helen Lines; Annabel Watson

Rethinking grammar: the impact of embedded grammar teaching on students' writing and students' metalinguistic understanding

Research Papers in Education 27.2 (2012), 139-166

In this large-scale study, Debra A. Myhill, Susan M. Jones, Helen Lines, and Annabel Watson use systematic quantitative and qualitative methods to measure impacts of their own grammar-in-context curriculum on over 700 secondary students' writing performance. They also measured the effects of their curriculum on students' metalinguistic awareness and their teachers' linguistic subject knowledge (LSK). The participants included an intervention group and comparison group of students aged 11-18 from 32 classrooms across a range of comprehensive schools. While the learning goals were the same for the two groups, the intervention group followed a grammar curriculum (one embedded within the regular writing curriculum). The curriculum placed emphasis on meaning and effects of grammatical choices rather than on decontextualized grammar terminology, and the major teaching goal was framed in terms of teaching grammatical resources rather than grammatical rules. As the authors put it, the goal "was to open up ... 'a repertoire of possibilities', rather than to suggest correct or formulaic ways of writing" (148). The design of the pre and post writing samples and the grading were both led by Cambridge Assessment, and the graders were unaware of the research focus. The qualitative data included teaching observations, teacher interviews, writing conversations with students, and writing samples from each class.

Overall, the authors found that their curriculum had a highly significant positive impact on students' writing. Specifically, they found that it had a more significant positive effect on the more skilled student writers, which they determined by the pre-test writing, and it had a more positive effect for students whose teachers had a high degree of linguistic knowledge, as determined by a questionnaire developed by the researchers. The qualitative data added a deeper level of understanding for these statistical findings. Teacher responses to the intervention, particularly regarding gains for students, were positive. Many reported confidence that their students' writing improved and that students were engaged with the grammar lessons. Students' writing discussions displayed a high degree of confidence in explicitly discussing word/phrase level grammar and less so with sentence and discourselevel issues. In general, students did not use much technical terminology when discussing grammar but instead used "everyday" metalanguage focused on text effects. Even so, the authors conclude that the data points to "a positive impact upon developing metalinguistic understanding" (158).

The authors conclude that their data "evidences a clearly theorised role for grammar in writing pedagogy" (162). While they are careful to acknowledge that "the intervention

may have been pitched too much towards able writers" (152) and that "the LSK of the teacher was a significant influencing factor" (153), they recommend that "grammar instruction needs to be made meaningful to the learners who are going to have to use it."

KEYWORDS: data, metalanguage, grammar, middle-school, secondary-school, pedagogy, embedded

Spycher, Pamela

Academic writing of adolescent English learners: Learning to use "although"

Journal of Second Language Writing 16 (2007), 238-254

In this article, Spycher reports on the instructional effects of using linguistic analysis in a high school English Language Development (ELD) class comprised mostly of tenth to twelfth grade native speakers of Spanish. The purpose of the instruction was to assist students to learn *about* language by giving them a metalanguage with which to analyze texts and, ultimately, promote their academic language development. Drawing on systemic functional linguistics, Spycher taught her students how to identify the lexico-grammatical resources that create an authoritative stance, logical relations between sentences, and textual cohesion. The three stages of her instructional model included: "(1) explicit teacher modeling and explanation of how to analyze (or deconstruct) text; (2) practice in deconstructing text, including opportunities for peer collaborative work; and (3) independent practice" (p. 244). For stage 3, students used graphic organizers to identify meaningful features of texts, e.g., use of cohesive devices. Instruction also included contrastive analysis so students could identify the differences between "everyday and academic ways of using English" (p. 249).

Spycher focuses her article on the effects of the interventions on one student, Ernesto. She analyzes before-and after-drafts of Ernesto's writing, showing how he learned to adopt a more distanced third-person stance, to use the connector "although" to signal concession in sophisticated ways, and to use nominalizations like *this* + *noun phrase* to create cohesive ties between sentences. She concludes that explicit attention to the features of academic language seems to have accelerated Ernesto's writing development. Based on this, she cautiously suggests that ELLs can make rapid progress in their academic writing development through the use of specific attention to and talk about linguistic resources that are valued in academic writing. At the same time, Spycher concedes several points: (1) not all the students were able to independently incorporate target linguistic features in their revisions; (2) the study does not address the question of transfer over time; and (3) the learning curve for writing instructors to acquire the linguistic knowledge "requires intensive and sustained professional development" (253). Spycher recommends that, if undertaken, such language-explicit approach to writing instruction works best when instructors work within supportive communities "where collaborative efforts between researchers, teachers, and students could result in useful insights and concrete pedagogical tools" (253).

KEYWORDS: data, secondary-school, ESL, cohesion, 'although', systemic functional linguistics, SFL, metalanguage

Part 4: Effects on Writing Quality (via Sentence-Combining)

Kanellas, Robert J.; James Carifio; Lorraine Dagostino

Improving the expository writing skills of adolescents

Lanham, MD: University Press of America (1998)

This monograph investigated the effect of "discourse function sentence-combining" on ninth graders' expository writing. Intrigued by the inconclusive link between sentence combining instruction and overall writing quality, the authors hypothesized that when improvement in writing quality *is* found, it is due to the fact that the instruction is contextualized and involves discussion of how language choices shape meaning. They adapted Willis Pitkin's (1977, 1978) taxonomy of discourse functions, loosely related to the modes, to develop sentence-combining materials that "promot[e] reading, thinking, and writing in specific rhetorical contexts" (p. 2). In the instructional materials, the syntactic structures that students practice are grouped under particular "functions," like cause-effect, series coordination, and assertion-contrast. Each function is paired with a unit in the students' biology textbook (e.g., nutrition; blood), and all sentences conveying that discourse function address that unit. (The final chapter describes the approach and provides a sample unit.)

The authors used a pretest-posttest control group design to assess the effect of the sentence-combining treatment on students' syntactic maturity, overall writing quality, quality of main ideas and details, organization, cohesion, sentence variety, and "usage" (concision and Standard English usage). One-hundred and twenty level-4 ninth-graders were randomly assigned to three experimental or three control group English classes. Each week for eight weeks, students reviewed a biology unit; completed traditional grammar exercises (control group) or cued and open sentence combining exercises; were tested on their content knowledge and their knowledge of the sentence-combining or grammar; and wrote an inclass expository essay on the biology topic (e.g., "identify and discuss the important features of a balanced diet").

Three instructors rated each writing task using a holistic and analytic scale; measures of syntactic maturity (mean words per clause, mean clauses per T-unit, and mean words per T-unit) were also computed. The authors then performed a repeated measures MANOVA with trend analysis.

The results were mixed. For all three syntactic maturity variables, there was no significant growth on the posttest means, and for two syntactic maturity variables, betweengroup differences were not significant. (The authors suspect the experimental group's lack of growth may have been partly due to the fact that students practiced combining phrasal structures, not clausal ones.) Yet in all the analytic and holistic variables, the experimental group outperformed the control group on their posttest means (although the strength of the significance varied). The results suggest that sentence-combining can indeed improve writing quality and, the authors argue, dispute the theory that writing quality is mediated through syntactic maturity. The authors call for further research on "the effects of sentence-combining treatments on various rhetorical or discourse objectives" (p. 81). KEYWORDS: high-school, pedagogy, expository, guidelines, teacher-training, pedagogy, English-ed, expository, data, sentence-combining, secondary-school, pre-pos

Keen, John

Sentence-combining and redrafting processes in the writing of secondary school students in the UK

Linguistics and Education 15.1-2 (2004), 8-97

Building on findings from sentence-combining research in the 1970s and 1980s that showed the positive effects of sentence combining on syntactic maturity and writing quality, Keen examines the linguistic features (and their corresponding rhetorical effects) that are changed when students revise a portion of an assignment using sentence-combining principles.

Working with a class of twenty-eight 15-year-old students in Manchester, UK, Keen collected original versions of a letter written from the point of view of a WW1 soldier and revised versions, which were composed after sentence-combining instruction. The instruction consisted of three stages (generally articulated by the author): (1) orientation, in which students analyzed the rhetorical effects of two versions of a narrative text, one of grammatically simple sentences and one in which those sentences are combined into "fluent writing" (p. 84), then practiced combining sentences in a different text; (2) application, in which students selected an excerpt from their own letter and were instructed to "try out different ways of joining the sentences together" and to choose the best version; (3) evaluation, in which students discussed which version was more effective.

Keen categorized each sentence in the original and revised versions by linguistic alteration (e.g., lexical addition, change of word class, reordering words, use of subordinating conjunction). He analyzes the effects of three types of changes: alterations involving coordinating conjunctions like "and," alterations involving the subordinating conjunctions "as" and "because," and alterations involving other kinds of subordination. For the use of "and," for instance, Keen contends that its addition in students' revised versions had a number of effects, such as creating an effect of simultaneity and facilitating complex clause planning. (For the latter, compare the student's original version— "the mud is sometimes two or three feet deep. Sometimes the mud is infested with rats that spread disease"-with the revised version—"the mud is sometimes two or three feet deep and infested with diseaseridden rats," p. 89.) For alterations involving subordination, effects include "tightening" cohesive and semantic links" (p. 94) and "creating the effect of more focused elaboration even when no extra information is added" (p. 95). Although Keen describes ways in which not all revised sentences are improvements, he argues that instruction in sentence combining, "used appropriately and creatively," "may be able to play a valuable part in helping students to deploy a variety of grammatical structures for a range of purposes and rhetorical effects" (p. 83).

KEYWORDS: data, linguistic-analysis, sentence-combining, secondary-school, Britain, pedagogy, revising

Wolfe, Joanna; Cynthia Britt; Kara Poe Alexander

Teaching the IMRaD genre: Sentence combining and pattern practice revisited

Journal of Business and Technical Communication 25.2 (2011), 119-158

Wolfe, Britt, and Alexander investigate the impact of rhetorical sentence-combining and pattern-practice exercises on technical communication students' writing and rhetorical knowledge. Worried that without effective pedagogies, technical communication instructors' attention to sentence-level issues is reactive-focused on problems in students' writing instead of on "the range of linguistic options they have at their disposal" (p. 121)—the authors turned to sentence-combining and pattern practice exercises, which have been shown to improve students' writing (although, they note, tend to be arhetorical). After reviewing research on the linguistic and rhetorical challenges of engineering writers, they developed rhetorical exercises to help technical communication students write IMRaD (Introduction, Methods, Results, and Discussion) reports. (The materials are available at http://louisville.edu/faculty/jlwolf02/writing-about-data.) The first pilot study gathered students' and instructors' impressions of the exercises: it was felt that although somewhat tedious, they improved students' writing. The second pilot study had a quasi-experimental design, with a control group (15 students in one semester-long course) and experimental group (55 students across four semester-long courses). In all groups, students wrote IMRaD reports, among other assignments, but in the experimental groups, students also completed the exercises.

An experienced technical writing instructor rated a sample of IMRaD reports on analysis of data, adherence to IMRaD, organization and coherence, use of concessions, errors, style, and overall quality. (One of the authors also evaluated the reports to check reliability, which ranged from strong to fair agreement above chance.) The reports written by the students in the experimental group were rated significantly higher than those in the control group for all seven criteria, with the greatest differences in adherence to IMRaD format, organization and coherence, and overall quality. Also, the students in the experimental group found the exercises helpful in improving their writing.

The researchers also sought to assess the impact on students' "rhetorical knowledge," giving them a questionnaire to rate the relative importance of three kinds of information in IMRaD reports: details, findings, and implications (based on Barabas' (1990) finding that managers more highly rated writing that emphasized implications). Indeed, students in the control group identified findings as most important and students in the experimental group identified implications as most important.

Although the students in the experimental sections received more help with the IMRaD reports because the teacher's pedagogy was continually evolving across the semesters she used the exercises, the data provide promising evidence that rhetorical sentence-combining and pattern-practice to support IMRaD report-writing can improve the quality of these reports. The authors noted that in both studies, engineering and science students found the exercises more helpful than did students from other majors, likely because IMRaD reports are more common in those majors—an argument for discipline-specific technical communication courses and for language-in-context instruction that fits contexts directly relevant to the student.

KEYWORDS: techcom, engineering, pattern-practice, sentence-combining, linguisticanalysis, grammar, data, pedagogy, grammar, arrangement, IMRaD [introduction, methods, results, discussion]

Part 5: Effects of Written Corrective Feedback

Bitchener, John; Ute Knoch

Raising the linguistic accuracy level of advanced L2 writers with written corrective feedback

Journal of Second Language Writing 19 (2010), 207-217

John Bitchener and Ute Knoch investigated the effects of providing written corrective feedback (CF) to advanced, university-level English-as-a second language (L2) writers, specifically on their use of articles (*the, a, an*). The study involved 63 learners in a first-year composition course for international students. It was built around two primary questions: (1) whether or not providing written CF (of any sort) has an effect on students' immediate and long-term accuracy on one grammatical principle and (2) whether or not there is a difference with regard to the type of written CF that students receive. The participants were divided into four groups: those who received *indirect* CF, meaning their article errors were circled but without explanation; those who received *direct* CF with metalinguistic commentary (each error was marked with an asterisk and accompanied by a description of the grammatical rule); those who received direct CF with metalinguistic commentary plus a 15 minute full-class discussion of the grammatical point; and finally a control group, who received no error correction. All participants took a pre-test, an immediate post-test in the second week of the term, and a delayed post-test in the tenth week of the term.

Results show significant differences between students who received written CF of any type and those who didn't. All three experimental groups, that is, performed significantly better than the control group on the immediate post-test. However, only the two groups that received direct CF with metalinguistic commentary performed better on the delayed post-test. In contrast, indirect grammar feedback—in this case defined as circling grammatical errors but without identifying the type of error or explaining the grammar rule—proved less effective for sustaining improved performance.

KEYWORDS: data, article, error, ESL, pre-post, metalanguage, FYC, grammar, pedagogy, feedback, response

Sheen, Younghee

The effect of focused written corrective feedback and language aptitude on ESL learners' acquisition of articles

TESOL Quarterly 41 (2007), 255-283

Younghee Sheen investigated the effects of two different kinds of written corrective feedback (CF) on adult English language learners' grammatical errors. The author's motivation was to see if direct written feedback on a targeted grammatical feature would improve students' control of that feature, as measured by a series of post-tests. Her motivation was also to see which kind of written CF is most effective for facilitating long-term gains. The target grammar principle in this study was control of definite and indefinite articles. The participants included six classes of adult ELLs enrolled in an American language program at a community college. Students in the six classes were divided into three groups: a control group who received no written feedback; a group that received direct CF with no metalinguistic commentary; and a group that received direct CF with metalinguistic commentary (explanation of the grammatical principle). Each group was given a language analytic ability test, pre-tests, posttests, and delayed posttest.

Sheen found that students who received direct CF along with metalinguistic commentary, which included explicit articulation of the grammatical principle and examples, sustained improved control over definite/indefinite articles over a longer period; this was measured especially by delayed post-tests conducted 3 to 4 weeks later. The improvement was also linked to the students' aptitude for language analysis: students who scored high on the language aptitude tests were better able to use the direct feedback to reach explicit understanding of underlying grammatical principles. The author accounts for these findings in terms of the value of *understanding* (and not just noticing) the underlying grammatical principle. As Sheen puts it, "whereas both direct CF with and without metalinguistic comments are likely to promote awareness as noticing, only direct CF with metalinguistic comments promotes awareness with understanding" (275).

KEYWORDS: data, article, error, adult-ed, ESL, grammar, pre-post