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Research Timeline

Written corrective feedback in second language acquisition and writing studies

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WRITTEN CORRECTIVE FEEDBACK, referred to hereafter as 'written CF' and also known as 'grammar correction' or 'error correction', has been a controversial topic in second language studies over the past fifteen years. Inspired by John Truscott's thought-provoking 1996 essay in *Language Learning*, many different researchers have undertaken new programs of investigation, while others have engaged in scholarly synthesis and argumentation around the topic.

This timeline presents a historical overview of how this concern has evolved over time. I have intentionally included works from four somewhat distinct sources: (1) studies of and essays about student error and teacher error correction from (L1) composition research; (2) studies focused on error correction in foreign language contexts (including languages other than English as well as EFL); (3) works from the L2 writing literature investigating learners in ESL contexts; and (4) research from second language acquisition (SLA) that investigates the impact of written CF on learners' acquisition of specific target structures. These different strands of primary and secondary research have overlapped and clearly informed each other, so although their authors examine the phenomenon of written CF through different lenses, it seems appropriate that all of them are represented in this historical summary.

The timeline can also be divided into separate themes, which are keyed in the last column of the chart. The first three themes represent different types of empirical work on written CF, while the fourth focuses on state-of-the-art essays, arguments, and one meta-analysis paper (Truscott 2007). The themes are as follows:

- **A** Text-analytic descriptions of student errors and teacher feedback
  - **A1** Proportions of grammar feedback compared with other types
  - **A2** Types of errors marked
  - **A3** Error correction types
- **B** Studies of the effects of written CF on SLA/writing quality
  - **B1** Controlled studies
  - **B2** Longitudinal classroom studies
- **C** Studies of teacher and student views on written CF
  - **C1** Student views
  - **C2** Teacher views
- **D** State-of-the-art essays, meta-analyses
  - **D1** State-of-the-art/argument essays
  - **D2** Meta-analyses

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The first theme emphasizes descriptive work of several types. In this group, sizable corpora of student texts and/or teacher error markings on student writings are analyzed, with errors/corrections identified, counted, and categorized. Such work has been used to chronicle the amount/types of students' written errors over time and/or teacher approaches to marking errors. In L1 composition research, this type of descriptive work comprises almost all of the empirical studies of error or CF that have been completed to date (with the exception of a short but influential paper on teacher error-marking strategies published by Haswell in 1983).

Group B covers the most influential and recent empirical work on written CF. It includes controlled quasi-experimental studies conducted by SLA researchers and longitudinal classroom studies by L2 writing and foreign language (FL) scholars. Subtopics include the short-term and long-term effects of written CF on student accuracy, comparisons of student writers who receive written CF and those who do not, and contrasts of different written CF approaches (e.g. direct vs. indirect feedback; focused vs. unfocused feedback; feedback with or without accompanying metalinguistic explanations).

Group C covers a sizable group of studies, mostly survey and interview work completed in the 1980s and 90s, examining student and/or teacher views on feedback to writers in general and on written CF specifically. This body of work is included here because it has been influential: The consistent finding from these studies – that students value and desire written CF on their texts – informs teacher practice, and it is difficult for those who propose abandoning written CF to overcome this obstacle through argumentation.

Such arguments are the focus of Group D. Though Truscott (1996) was not the first to suggest or propose that written CF was ineffective and should be abandoned, his paper inspired not only new research (to test his claims and/or 'prove' him wrong) but also other argument and rebuttal papers. While Truscott's exchange with Ferris in the *Journal of Second Language Writing* (Ferris 1999; Truscott 1999) is probably the best known of these, he has traded rebuttal papers with others since then (with Chandler: Truscott 2004, 2009). Beyond rebuttals, several papers since 1996 have examined both Truscott's original arguments in his 1996 paper and methodological issues in the available research base. These include Ferris (2003, 2004), Hyland & Hyland (2006), Guénette (2007), and Bitchener & Ferris (2012).

Because of the proliferation of empirical work and scholarly analyses/arguments over the past 15 years, I have had to leave a few recent pieces out of the timeline, such as the rebuttals just mentioned. Due to space considerations, I have also omitted several studies by authors already in the timeline, choosing the pieces I found most representative of their line of work and/or which in my opinion move the conversation forward most clearly.

Overall, this is a robust and lively field of inquiry that continues to arouse a great deal of interest from teachers and researchers, as is indicated by the fact that articles on written CF are among the most downloaded and cited in the *Journal of Second Language Writing* (www.jslw.org). Both the recent empirical work and the various scholarly syntheses and analyses have improved our methods, sharpened our research questions, and given us specific ideas for pedagogy and teacher preparation as well as further ideas and parameters for future investigations. This topic is a good example of how many different minds working on the same questions really can move a field forward in productive ways.

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Truscott, J. (2004). Evidence and conjecture: A response to Chandler. *Journal of Second Language Writing* 13, 337–343.
Truscott, J. (2007). The effect of error correction on learners' ability to write accurately. *Journal of Second Language Writing* 16, 255–272.
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DANA FERRIS is Professor in the University Writing Program at the University of California, Davis. She is an applied linguist by training, and her research focuses on second language writers and their L2 literacy development. In particular, her work over the past 15 years has emphasized feedback to student writers and the specialized topic of written CF. Her most recent article on this topic was published in *Studies in Second Language Acquisition* (2010), and her most recent books include *Written corrective feedback in second language acquisition and writing* (co-authored with John Bitchener, 2012, Routledge), *Treatment of error in second language student writing* (2nd edn, 2011, University of Michigan Press), and *Teaching college writing to diverse student populations* (2009, University of Michigan Press).

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YEAR	REFERENCE	ANNOTATION	THEME
1930	Harap, H. (1930). The most common grammatical errors. *English Journal* 19.6, 440–446.	This brief paper provides a composite profile of students' written and oral errors and is based upon 33 earlier studies dating from 1908–1927. 106 error types were described under eight major subcategories.	**A1**, **D2** (but not strictly a 'meta-analysis' in that no statistics are reported)
1967	Corder, S. P. (1967). The significance of learners' errors. *International Review of Applied Linguistics* 5.1, 161–170.	**Corder**'s paper was significant because it challenged prevalent views about learner errors (that they were distracting and needed to be eradicated), arguing, rather, that errors provide important clues about SLA. This thesis influenced SLA-focused studies of error, especially in the 1970s and 80s.	**D1**
1976	Cohen, A. D. & M. Robbins (1976). Toward assessing interlanguage performance: The relationship between selected errors, learners' characteristics, and learners' expectations. *Language Learning* 26.1, 45–66.	In this early, often-cited study, three students (L1 Mandarin) in a university ESL class were studied over a ten-week quarter to assess the effects of error correction on their use of verb forms in written English. The authors noted that inadequate correction techniques, not correction itself, may provide an explanation for lack of student progress.	**B2**, **C1**
1977	Shaughnessy, M. P. (1977). *Errors and expectations*. New York: Oxford University Press.	In this important book, **Shaughnessy** analyzes over 4000 texts written by college students (including L2) in New York, identifying error patterns and suggesting pedagogical strategies for teachers of at-risk (developmental) student writers.	**A1**
1978	Kroll, B. M. & J. C. Schafer (1978). Error-analysis and the teaching of composition. *College Composition and Communication* 29.3, 242–248.	Citing CORDER[1] (1967) and SHAUGHNESSY (1977), the authors argue that composition instructors should use error-analysis techniques informed by applied linguistics to study errors made by student writers.	**D1**
1980	Bartholomae, D. G. (1980). The study of error. *College Composition and Communication* 31.3, 253–269.	Like KROLL & SCHAFER (1978) and SHAUGHNESSY (1977), **Bartholomae** argues for a situated analysis of student errors, including sample transcripts from his interactions with his own students.	**D1**

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YEAR	REFERENCE	ANNOTATION	THEME
1980	Hendrickson, J. M. 1980. The treatment of error in written work. *The Modern Language Journal* 64.2, 216–221.	In this influential paper, **Hendrickson** discusses approaches to error correction in L2 writing. Most notably, the terms 'direct' and 'indirect' correction, found in later papers, derive from this piece.	**D1**
1981	Williams, J. M. (1981). The phenomenology of error. *College Composition and Communication* 32.2, 152–168.	In an extremely influential paper, **Williams** counters SHAUGHNESSY (1977) and BARTHOLOMAE (1980) to some extent by arguing that much student 'error' is created or 'read' by teachers who are looking for problems.	**D1**
1982	Sommers, N. (1982). Responding to student writing. *College Composition and Communication* 33.2, 148–156.	**Sommers** examined comments given by 35 university writing teachers to three sample student papers, criticizing, like WILLIAMS (1981), teachers who 'read. . .expecting to find errors' (p. 154), who give error feedback too early in the writing process, and who give students contradictory messages about error and revision.	**A1**, **D1**
1982	Brannon, L. & C. H. Knoblauch (1982). On students' rights to their own texts: A model of teacher response. *College Composition and Communication* 33.2, 157–166.	Using the same teacher commentary sample as SOMMERS (1982), the authors argue that teachers use feedback to create an 'Ideal Text' and, in so doing, usurp student authorship: 'By focusing on error, the teacher is. . .the judge of the writing' (p. 162).	**A1**, **D1**
1982	Lalande, J. F. II (1982). Reducing composition errors: An experiment. *The Modern Language Journal* 66.2, 140–149.	In this experimental study, 60 college-level students of German received either **direct** or **indirect** error feedback. Posttest results indicated that students receiving indirect feedback to engage them in 'guided learning and problem-solving' (p. 143) were more successful in reducing written errors over time.	**B1**, **B2**
1983	Haswell, R. H. (1983). Minimal marking. *College English* 45.6, 600–604.	**Haswell** assessed the effectiveness of his 'minimal marking' error correction technique (check-marks in margins indicating presence of error) with his 24 first-year composition students, finding them able to quickly self-edit 61% of the errors noted. Like LALANDE (1982), Haswell argues for less explicit correction that places more responsibility with the student.	**B2**

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1984	Semke, H. (1984). The effects of the red pen. *Foreign Language Annals* 17.3, 195–202.	**Semke** looked at the effects of four different feedback treatments (direct error feedback, indirect error feedback, direct error correction + content comments, content comments only) on the journal writing of college-level German foreign language students, finding no posttest differences across groups in error ratios.	**B2**
1985	Zamel, V. (1985). Responding to student writing. *TESOL Quarterly* 19.1, 79–102.	As in the L1 composition studies by SOMMERS (1982) and BRANNON & KNOBLAUCH (1982), **Zamel** examined comments written by teachers on ESL students' compositions, concluding that teachers focused heavily on surface errors and seemed to view themselves primarily as language teachers rather than writing instructors.	**A1**, **D1**
1986	Robb, T., S. Ross & I. Shortreed (1986). Salience of feedback on error and its effect on EFL writing quality. *TESOL Quarterly* 20.1, 83–93.	Like LALANDE (1982) and SEMKE (1984), **Robb et al.** investigated the effects of four different error feedback treatments on 134 Japanese EFL learners over one school year. The treatments ranged from very explicit (direct feedback) to inexplicit (error totals in the margins, similar to HASWELL 1983). Though all four groups made progress, there were no significant differences across treatment groups, leading the authors to conclude that less time-consuming approaches could be equally effective.	**B2**
1987	Cohen, A. (1987). Student processing of feedback on their compositions. In A. L. Wenden & J. Rubin (eds.), *Learner strategies in language learning*. Englewood Cliffs, NJ: Prentice-Hall, 57–69.	**Cohen** questioned 217 college student writers (including ESL and native English speakers) about their perceptions of teacher feedback. Students claimed that most of their teachers' feedback was about grammar and that they read and attended to teacher commentary.	**C2**
1988	Connors, R. & A. A. Lunsford (1988). Frequency of formal errors in current college writing, or Ma and Pa Kettle do research. *College Composition and Communication* 39.4, 395–409.	Building on the early twentieth-century work summarized in HARAP (1930), **Connors & Lunsford** analyzed 3000 student papers marked by teachers from around the US, classifying 28,571 errors into 20 different categories. Of the errors marked by independent raters, 41% had been marked by the original teachers, and various error types were marked more/less frequently by teachers.	**A2**

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1988	Radecki, P. & J. Swales (1988). ESL student reaction to written comments on their written work. *System* 16.3, 355–365.	In a study similar to that of COHEN (1987), the authors surveyed 59 university ESL students about their reactions to teacher commentary on their writing. Student said their teachers gave them a combination of error correction and feedback on content and that they preferred direct teacher correction of all their errors.	**C2**
1990	Cohen, A. & M. Cavalcanti (1990). Feedback on written compositions: Teacher and student verbal reports. In B. Kroll (ed.), *Second language writing: Research insights for the classroom*. Cambridge: Cambridge University Press, 155–177.	Following the study by COHEN (1987), the authors surveyed nine Brazilian EFL student writers about their perceptions of teacher feedback, triangulating the data collection by also talking with the three teachers and examining samples of their commentary. Again, students reported that most teacher feedback focused on grammar and mechanics, but the authors note 'a poor fit' (p. 169) between student views and actual teacher feedback.	**A1**, **C1**, **C2**
1990	Fathman, A. & E. Whalley (1990). Teacher response to student writing: Focus on form versus content. In B. Kroll (ed.), *Second language writing: Research insights for the classroom*. Cambridge: Cambridge University Press, 178–190.	Seventy-two ESL students at two US colleges were divided into four feedback treatment groups: content only, error only, content plus error, and no feedback. Students in the two groups that received grammar feedback significantly reduced their errors in a revision; those in the other two groups did not.	**B1**
1991	Kepner, C. G. (1991). An experiment in the relationship of types of written feedback to the development of second-language writing skills. *The Modern Language Journal* 75.3, 305–313.	Like FATHMAN & WHALLEY (1990), the author looked at the effects of content- vs. form-based feedback on student writing. Sixty college-level FL students of Spanish were divided into two groups: one received only meaning-focused feedback on their journal entries, and the other group received only grammar-focused feedback. Both groups showed improvement over time in the realm in which they had received feedback.	**B1**, **B2**
1991	Leki, I. (1991). The preferences of ESL students for error correction in college-level writing classes. *Foreign Language Annals* 24.3, 203–218.	One hundred college-level ESL writers in composition classes were questioned about error correction preferences. Most preferred comprehensive teacher correction with correction clues over direct feedback (contrary to RADECKI & SWALES 1988).	**C1**

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YEAR	REFERENCE	ANNOTATION	THEME
1992	Sheppard, K. (1992). Two feedback types: Do they make a difference? *RELC Journal* 23.1, 103–110.	As in KEPNER (1991) and FATHMAN & WHALLEY (1990), the primary contrast was between students receiving feedback on content and those receiving feedback on form. Twenty-six upper-intermediate ESL learners were divided into two groups for a ten-week period: one received written CF on content and the other received written CF on form. The two groups showed no differences with respect to gains in accuracy.	**B1**
1993	Enginarlar, H. (1993). Student response to teacher feedback in EFL writing. *System* 21.2, 193–204.	Following RADECKI & SWALES (1988), 47 EFL students in Turkey were surveyed about their teacher feedback preferences. As to grammar correction, students preferred a problem-solving collaborative approach (similar to LEKI 1991).	**C1**
1994	Hedgcock, J. & N. Lefkowitz (1994). Feedback on feedback: Assessing learner receptivity in second language writing. *Journal of Second Language Writing* 3.2, 141–163.	The authors surveyed 247 university students – both ESL and FL – about teacher feedback, finding that FL students said their teachers primarily provided error correction while ESL students received feedback on a broader range of writing issues. Some students expressed confusion over teacher correction techniques.	**C1**
1994	Saito, H. (1994). Teachers' practices and students' preferences for feedback on second language writing: A case study of adult ESL learners. *TESL Canada Journal* 11.2, 46–70.	**Saito** surveyed 39 college-level ESL writers taught by three different teachers, also examining student texts and teacher feedback, as in COHEN & CAVALCANTI (1990). She found that the three teachers had different approaches to feedback and that the students were equally favorable toward indirect and direct teacher error correction. Students also preferred feedback that asked them to articulate a rule for self-correcting errors.	**A2**, **A3**, **C1**
1995	Ferris, D. R. (1995). Can advanced ESL students be taught to correct their most serious and frequent errors? *CATESOL Journal* 8.1, 41–62.	A group of 30 university-level ESL writers was followed during a semester-long composition class. They received error feedback tailored for their individual needs on three out-of-class and two in-class essays. They also had in-class mini-lessons on common grammar problems and maintained error logs (similar to LALANDE 1982). All students made some progress over time in reducing specific error types, but there were differences across students and across in-class vs. out-of-class tasks.	**B2**

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1996	Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning* 46.2, 327–369.	**Truscott** argues that 'grammar correction' is not effective and may even be harmful and that teachers should 'abandon' it. Reviewing several earlier studies such as KEPNER (1991), FATHMAN & WHALLEY (1990), SEMKE (1984), and LALANDE (1982), Truscott claims that (1) the evidence suggests that grammar correction is futile; (2) teachers' correction practices ignore findings from SLA; and (3) the practical problems faced by teachers and students militate against correction being useful. He further argues that correction takes teacher/student time and energy away from more important writing issues.	**D1**
1997	Ferris, D., S. Pezone, C. Tade & S. Tinti (1997). Teacher commentary on student writing: Descriptions and implications. *Journal of Second Language Writing* 6.2, 155–182.	In a longitudinal study of how one writing teacher provided feedback to 47 university ESL writers in three composition courses, over 1500 comments were classified. The researcher found that the teacher made comments on a wide range of issues, with about 15% focused on grammar or mechanics. Feedback varied also according to the point in the semester, task type, and student ability level.	**A1**
2000	Ashwell, T. (2000). Patterns of teacher response to student writing in a multiple-draft composition classroom: Is content feedback followed by form feedback the best method? *Journal of Second Language Writing* 9.3, 227–258.	In an approach similar to that of ROBB ET AL. (1986), **Ashwell** divided 50 Japanese EFL university students into four feedback groups, with three of the four receiving form-based feedback at different stages of the writing process. He found that the groups receiving written CF wrote significantly more accurate revisions than the control group that received no correction, and that there was no need to separate content- and form-based feedback on the same draft of student papers.	**B1**
2001	Ferris, D. R. & B. J. Roberts (2001). Error feedback in L2 writing classes: How explicit does it need to be? *Journal of Second Language Writing* 10.2, 161–184.	A group of 72 ESL university students wrote short essays and were divided into three treatment groups: (1) indirect error feedback with correction codes; (2) indirect error feedback with no codes (errors underlined); and (3) no feedback. As found by ASHWELL (2000), the two treatment groups significantly outperformed the control group in editing their texts successfully. The authors argue (as do ROBB ET AL. 1986) that for some contexts, less explicit error feedback may be adequate.	**B1**

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2003	Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of Second Language Writing* 12.3, 267–296.	In an approach similar to that of LALANDE (1982), ROBB ET AL. (1986), ASHWELL (2000), and FERRIS & ROBERTS (2001), **Chandler** compared the effects of differing error correction treatments on 31 university ESL students divided into two groups. The treatment group was required to rewrite compositions to correct errors after every first draft, while the control group was not asked to do so until weeks later. The treatment group significantly decreased its error ratios over time and outperformed the control group.	**B2**
2004	Ferris, D. R. (2004). The 'grammar correction' debate in L2 writing: Where are we, and where do we go from here? (and what do we do in the meantime. . .?) *Journal of Second Language Writing* 13.1, 49–62.	Following TRUSCOTT (1996) and FERRIS (1999), this essay outlines problems with the current research on written CF, some possible research questions for the future, and some suggestions for teachers based on existing knowledge.	**D1**
2005	Bitchener, J., S. Young & D. Cameron (2005). The effectiveness of different types of corrective feedback on ESL student writing. *Journal of Second Language Writing* 14.3, 191–205.	Fifty-three university ESL students were divided into three treatment groups, receiving (1) direct correction of three specific error types; (2) direct correction with added oral metalinguistic explanation; or (3) control (no correction). The researchers found that group (2) outperformed the other groups on written posttests on two error categories (verb tense and articles) but found no difference in the third (prepositions).	**B1**
2006	Ferris, D. R. (2006). Does error feedback help student writers? New evidence on the short- and long-term effects of written error correction. In K. Hyland & F. Hyland (eds.), *Feedback in second language writing: Contexts and issues*. Cambridge: Cambridge University Press, 81–104.	The essays written by 92 ESL university students in six sections of a course taught by three different teachers were marked in 16 error categories over a semester. The students successfully revised over 81% of the errors marked by their teachers, with success rates varying across error type and teacher correction approach.	**B2**

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2006	Hyland, K. & F. Hyland (2006). Feedback on second language students' writing. *Language Teaching* 39.2, 83–101.	The **Hylands**' state-of-the-art article covers several subtopics regarding feedback, including error correction. They review research on several written CF issues, including explicitness of feedback and its short- and long-term effects on writing improvement and SLA.	**D1**
2007	Guénette, D. (2007). Is feedback pedagogically correct? Research design issues in studies of feedback in writing. *Journal of Second Language Writing* 16.1, 40–53.	Like FERRIS (2004), **Guénette** argues that flaws and inconsistencies in research designs account for the lack of consistent or conclusive findings across the research on written CF. After reviewing previous studies across several design variables, she concludes that for such research to be useful for teachers and students, these variables must be more carefully controlled, and other external variables need to be accounted for.	**D1**
2007	Montgomery, J. L. & W. Baker (2007). Teacher-written feedback: Student perceptions, teacher self-assessment, and actual teacher performance. *Journal of Second Language Writing* 16.2, 82–99.	Following the smaller study by COHEN & CAVALCANTI (1990), the researchers surveyed 15 writing teachers and 98 ESL students in an intensive ESL program about the teachers' priorities and strategies in providing written feedback. Teachers' commentary was also examined. The authors noted discrepancies between teachers' self-perceptions and their actual commenting behavior. Specifically, they were likely to give more local/grammar-oriented feedback, especially on early drafts, than they believed they did (or should).	**A1**, **C1**, **C2**
2007	Sheen, Y. (2007). The effect of focused written corrective feedback and language aptitude on ESL learners' acquisition of articles. *TESOL Quarterly* 41.2, 255–283.	**Sheen** divided 91 intermediate-level ESL writers into three treatment groups. Group 1 received direct correction on their errors with direct and indirect article use. Group 2 received direct correction plus written metalinguistic explanations for the article rules. Group 3 was the control (no feedback) group. Groups 1 and 2 outperformed Group 3 on posttests, and Group 2 outperformed Group 1.	**B1**
2007	Truscott, J. (2007). The effect of error correction on learners' ability to write accurately. *Journal of Second Language Writing* 16.4, 255–272.	With the goal of updating his 1996 argument against written CF, **Truscott** combines 'qualitative analysis of the relevant studies with quantitative meta-analysis of their findings' (p. 255), concluding that written CF has very little potential benefit for student writers. His quantitative sample was quite small, as he excluded many studies (for a variety of reasons that he explains in the paper).	**D2**

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YEAR	REFERENCE	ANNOTATION	THEME
2008	Bitchener, J. (2008). Evidence in support of written corrective feedback. *Journal of Second Language Writing* 17.2, 102–118.	In an approach similar to that of SHEEN (2007), **Bitchener** examined the effects of written CF on article errors with 75 low-intermediate ESL learners. To Sheen's three groups, Bitchener added a fourth: direct correction with written and oral metalinguistic explanation. All three treatment groups outperformed controls on immediate and delayed posttests, and the group receiving additional oral explanation outperformed the group receiving only written explanations.	**B1**
2008	Ellis, R., Y. Sheen, M. Murakami & H. Takashima (2008). The effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System* 36.3, 353–371.	Like SHEEN (2007) and BITCHENER (2008), the researchers looked at the effects of written CF on article acquisition. This study emphasized differences between *focused* and *unfocused* correction. Forty-nine intermediate ESL students were divided into three groups: (1) direct focused feedback; (2) direct unfocused feedback; (3) controls. The two treatment groups outperformed the controls in a delayed posttest ten weeks later, but there were no significant differences between the focused and unfocused feedback groups.	**B1**
2008	Lee, I. (2008). Understanding teachers' written feedback practices in Hong Kong secondary classrooms. *Journal of Second Language Writing* 17.2, 69–85.	Like COHEN & CAVALCANTI (1990), ENGINARLAR (1993), and MONTGOMERY & BAKER (2007), **Lee** examined written feedback given by 26 secondary EFL teachers in Hong Kong on 174 student papers, also interviewing six teachers. She found that the teachers focused primarily on grammar in their feedback and that their feedback philosophies and practices were constrained by contextual factors (culture and institution) and by a lack of adequate teacher training.	**C2**
2008	Lunsford, A. A. & K. J. Lunsford (2008). 'Mistakes are a fact of life': A national comparative study. *College Composition and Communication* 59.4, 781–806.	In this replication of CONNORS & LUNSFORD (1988), the researchers examined a corpus of 877 teacher-marked student texts to see if student errors and/or teacher correction approaches had changed over the 20 years since the previous study. They found differences in student error patterns that they argued were partially attributable to changing assignment types (lengthier and more complex) and to the increased use of computers.	**A2**

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YEAR	REFERENCE	ANNOTATION	THEME
2008	Truscott, J. & A. Y.-P. Hsu (2008). Error correction, revision, and learning. *Journal of Second Language Writing* 17.4, 292–305.	Forty-seven EFL graduate students were divided into two treatment groups. One received underlined, indirect written CF on errors (similar to the design in FATHMAN & WHALLEY 1990 and one of the groups in FERRIS & ROBERTS 2001) and the control group received no feedback. The treatment group outperformed the control group in self-editing revisions of the same text, but there were no differences between the groups on a posttest one week later. The authors argue that this finding demonstrates that gains seen in revision tasks do not transfer to learning.	**B1**
2009	Bruton, A. (2009). Improving accuracy is not the only reason for writing, and even if it were. . . *System* 37.4, 600–613.	Here, **Bruton** reviews some of TRUSCOTT'S later papers as well as several of the latest studies on written CF. He reminds readers that decisions about written CF must be carefully considered within the larger context of the goals of writing instruction.	**D1**
2010	Bitchener, J. & U. Knoch (2010a). The contribution of written corrective feedback to language development: A ten month investigation. *Applied Linguistics* 31.2, 193–214.	This study was similar in design to BITCHENER (2008), except that the delayed posttest here was ten months later (compared with two months for the earlier study). Again, all treatment groups outperformed the control group.	**B1**
2010	Bitchener, J. & U. Knoch (2010b). Raising the linguistic accuracy level of advanced L2 writers with written corrective feedback. *Journal of Second Language Writing* 19.4, 207–217.	In this study, 63 advanced ESL learners were divided into four treatment groups: (1) direct written CF with written metalinguistic input; (2) indirect focused circling; (3) direct written CF with written and oral metalinguistic input; (4) control (no feedback). The two direct focused groups outperformed the indirect group, and all three treatment groups outperformed controls on a ten-week delayed posttest.	**B1**
2010	Hartshorn, J. K., N. W. Evans, P. F. Merrill, R. R. Sudweeks, D. Strong-Krause & N. J. Anderson (2010). The effects of dynamic corrective feedback on ESL writing accuracy. *TESOL Quarterly* 44.1, 84–109.	The authors argue that too much attention has been given to the 'if' of written CF, to the detriment of examining the 'how': the best ways for teachers to provide written CF. They present a method they call 'dynamic WCF', in which students write short, frequent texts, receive immediate, comprehensive correction, and revise their corrected texts (an approach somewhat similar to that of HASWELL 1983). They also present preliminary data suggesting that this method provides more lasting benefits than traditional error correction methods.	**B2**, **D1**

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2012	van Beuningen, C., N. H. de Jong & F. Kuiken (2012). Evidence on the effectiveness of comprehensive error correction in second language writing. *Language Learning* 62.1, 1–41.	Working with 268 secondary learners of Dutch as a foreign language, the researchers examined the effects of written CF in both short-term revisions and on new texts over time. They examined a broader range of error types than in the 'article studies' (BITCHENER ET AL. 2005; SHEEN 2007; BITCHENER 2008; ELLIS ET AL. 2008; BITCHENER & KNOCH 2010a, 2010b) and further examined TRUSCOTT'S (2007) claim that error reduction might simply stem from learners' avoidance of problematic structures. They found that all learners who received written CF outperformed controls over time, that different types of feedback seemed beneficial for different linguistic domains (direct for grammar errors; indirect for lexical errors), and that learners did not simplify their texts to avoid errors.	**B1**, **B2**
2012	Bitchener, J. & D. R. Ferris (2012). *Written corrective feedback in second language acquisition and writing*. New York: Routledge.	This book provides a scholarly synthesis and analysis of theory, research, and practice on written CF to date, examining it from the dual perspective of applied linguists studying SLA and composition scholars studying writing.	**D1**

[1]Authors' names are shown in small capitals when the study referred to appears in this timeline.