

The Future of Feedback: A Brief Despatch from the Grammar Correction Wars

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Introduction

John Truscott's article, "The case against grammar correction in L2 writing classes", was published in the journal *Language Learning* in 1996. Although the journal classified it as a review article, in some ways it reads more like a position paper, if not a polemic. In his article, Truscott surveys the bulk of the research on the efficacy of grammar correction in second language (L2) writing classes conducted prior to 1996 and reaches three conclusions: "(a) substantial research shows it to be ineffective and none shows it to be helpful in any interesting sense; (b) for both theoretical and practical reasons, one can expect it to be ineffective; and (c) it has harmful effects" (1996, p. 327). This quotation is from the abstract; thirty-four pages later, after reviewing a wide range of theory and research (his bibliography contains well over a hundred items), Truscott's final statement is that "for the foreseeable future, my conclusion stands: grammar correction has no place in writing classes and should be abandoned" (1996, p. 361).

Although Truscott's intervention in the debate on the value of grammar correction in L2 writing classes was certainly a decisive one, his article did not in fact initiate that debate: the issue had been seen as problematic, or at least as something which needed discussion, since the advent of the process approach to writing in the late 1960s and early 1970s. Earlier L2 writing education paradigms—for example, controlled composition, or the subsequent approach usually referred to as "current traditional rhetoric" (see Silva, 1990, for a historical overview of approaches to the teaching of L2 writing)—assumed rather simplistically that thorough correction by the teacher was the royal road to learning. In the case of controlled composition, the rationale was a behaviourist one: language acquisition was a matter of habit formation, writing was basically used to reinforce orally acquired habits, and error "like sin, [was] to be avoided at all cost" (Brooks, 1960). In the case of current traditional rhetoric, although the focus had broadened from an exclusive emphasis on linguistic correctness at the sentence level, the approach was still fundamentally a product- rather than process-oriented one, and summative feedback by the teacher was seen as providing the learner with vital information, including linguistic information, about how closely his or her text approximated a normative model. In both these approaches, error correction was seen as being unproblematically helpful.

This way of thinking began to change as the process approach to composition teaching became more

influential in the 1970s. As its name implies, the process approach moved away from seeing writing purely in terms of being a product and instead focused on the ways in which experienced writers actually engage in the process of composition. In this approach, writing is seen as essentially a problem-solving activity: it is a “non-linear, exploratory and generative process whereby writers discover and reformulate their ideas as they attempt to approximate meaning” (Zamel, 1983, p. 165). As such, the writing process consists of planning, drafting, reconsidering, reorganising, and revising, and these activities are recursive rather than linear; the main task of the L2 writing teacher is seen, therefore, as being to create classroom conditions in which the learners can most fruitfully engage in this exploratory and recursive process (see Hyland, 2002, pp. 25-26, for a succinct overview of the process approach).

As a result of the paradigm shift from more product-oriented to more process-oriented approaches, the kind of feedback offered to learners by teachers changed in two important ways. Firstly, there was a shift from feedback being regarded as a summative evaluation of a completed product to feedback being seen as formative—that is, as something to be provided during the process of drafting and re-drafting with the aim of assisting the development of the writing. Secondly, feedback became focused on matters of content and rhetorical organisation rather than purely on linguistic correctness. Indeed, the correction of grammar was not seen as a particularly useful activity, and as one which, if done at all, should be done at the end of the writing process: grammar correction, the argument was, was a matter of mere “editing” rather than anything of more formative value. Zamel’s view of correction was typical of that common among practitioners of the process approach: in her view, it tended to distract learners from the proper concerns of the composition process by making them excessively concerned about error (Zamel, 1985).

Matters did not rest there, however, and counter-attacks were mounted by those who argued that an over-emphasis on process, along with the value placed on self-expression and finding one’s own voice which tends to come as part and parcel of the process approach, were not helping L2 writers produce texts at acceptable levels of linguistic accuracy. This was especially seen as being a problem in the case of academic writing since, as Horowitz (1986) pointed out, accuracy is important to professional audiences in academic settings; in his view, any teaching approach which failed to address this issue was not serving learners well. Linguistic accuracy is also felt to be important by student writers themselves: when students have been asked whether or not they value teacher-correction of their writings, the response has been overwhelmingly affirmative (see Hyland & Hyland, 2006, for a survey of research into learner responses to corrective feedback). Thus, arguments about institutional appropriateness, the wishes of learners themselves, and the intuitive belief of many language teachers in the efficacy of corrective feedback—a belief often based on their own earlier experience as learners—have combined to ensure that the practice of grammar correction has by no means disappeared from L2 writing classes; the majority of L2 writing teachers continue to engage in some sort of error correction of their learners’ writing—and often continue to complain about how much time and energy this consumes.

In one sense, then, Truscott’s intervention, for all its forcefulness and its notoriety, does not seem to have made much difference in the actual world of writing classes; few L2 writing classrooms have become “correction-free” zones in the way Truscott has advocated. This does not imply that his intervention has not

been a productive one, however. The thoroughness of his review of the literature, and the vigour with which he has expressed his conclusions, have helped to set the terms of the debate, mostly conducted in the pages of the *Journal of Second Language Writing*, and to motivate a research tradition dedicated to showing that his views on the lack of efficacy, or even harmfulness, of grammar correction are wrong.

As yet, the results produced by this research have not been conclusive. After summarising the argument of Truscott's original article, I will briefly describe some of this research, and then go on to comment on a few of the counter-arguments to Truscott put forward by his main opponents (Bitchener, 2008; Bitchener, Young, & Cameron, 2005; Chandler, 2003, 2004, 2009; Ferris, 1999, 2004, 2006) as well as some of the counter-counter-arguments of Truscott himself (Truscott, 1999, 2004, 2007, 2009). One point which will emerge from this is that the lack of decisive evidence obtained so far can partly be ascribed to the methodological difficulties involved in any attempt to "prove" that written grammar correction on its own does irrefutably lead to quantifiable gains in linguistic accuracy.

Given that such difficulties exist, the theoretical arguments for or against error correction become that much more important, and I will then, in the main part of this paper, go on to discuss these. Truscott has consistently claimed that there are unanswerable theoretical grounds for thinking that corrective feedback will be ineffective, and he has gone on to claim that the burden of proof therefore lies with those who argue in favour of correction to show that it is effective, not with those who argue against it to show that it is ineffective. Although he has not articulated the theory underlying his claims at any great length, I will examine the theoretical justifications that he has produced (1996, pp. 342-349) and then go on to argue that actually there are sufficient theoretical reasons, arising from work in the fields of both second language acquisition (SLA) and cognitive psychology, for us to predict that corrective feedback is likely to have benefits both for learners' language acquisition and for the development of their writing skills.

Truscott's critique

Before starting his critique of the case for grammar correction, Truscott emphasises that it is specifically *grammar correction* that he will be arguing against: "I do not deny," he writes, "the value of grammatical accuracy; the issue is whether or not grammar correction can contribute to its development" (1996, p. 329). He also makes clear that he is not arguing against feedback *per se*; he does not, he says, suggest that teachers' responses to the content, organisation, or clarity of students' compositions are misguided.

He then begins by reviewing several key pieces of research, including Semke (1984), Robb, Ross, and Shortreed (1986), Kepner (1991), and Sheppard (1992). All of these found that grammar correction did not lead to any improvement in learners' grammatical accuracy; worse, some of them found that the groups which received feedback on content not only did no worse in terms of accuracy than those who received feedback on grammar, they actually outperformed the grammar correction group in various ways: in fluency and on a cloze test, (Semke), in the quality of content as measured by the number of higher-level propositions in the learners' final assignment (Kepner), or in the accurate marking of sentence boundaries (Sheppard).

Truscott then goes on to review a number of pieces of research which have been taken to show that grammar correction is effective, but which he argues do not actually provide evidence to support that position, either because they are studies of the effect of correction on learners' revision of their texts rather than its effect on their learning, or because the research design does not include a control group, which means that statements about the effect (positive or negative) of correction cannot be safely made. Typical of these two types of studies are Fathman and Whalley (1990), which is actually a study of the effect of grammar correction on learners' revisions of existing pieces of writing rather than of whether such feedback leads to learning which is transferable to new pieces of writing, and Lalande (1982), who compared two different kinds of error correction and found that one worked better than the other, but who did not have a control group consisting of learners who received no correction.

In the next part of his article, Truscott discusses the theoretical reasons "why grammar correction cannot work"—to quote the title of this section. He makes three points. Firstly, he argues that support for error correction is based on an incorrect belief that learning consists of the transfer of information from teacher to student; that is, the student makes a mistake, the teacher tells the student what the correct form is, and the student then has learnt the correct form. This, as Truscott rightly observes, is not how language acquisition works. Secondly, he argues that the existence of acquisition orders and developmental sequences in the evolution of learners' interlanguages (see Goldschneider & DeKeyser, 2001, for an overview and meta-analysis of "natural order" research) means that it is unlikely that learners will benefit from grammar correction focused on any particular point until their internal syllabus allows them to do so; moreover, given our current state of knowledge in this area, the difficulties for a teacher of identifying whether any particular student is ready for correction on any particular grammatical point are almost insuperable. Thirdly, he makes the point that grammar correction is likely to produce only learned, explicit, metalinguistic knowledge and thus result in what he calls "pseudolearning" rather than genuine language acquisition; that is, students will end up with increased knowledge about language rather than increased ability to use the language fluently and effectively. These three points lie at the heart of Truscott's theoretical argument, and I will return to them and discuss them in greater detail in a later section of this article.

Truscott then describes the practical problems which make it difficult for error correction to be effective: 1) the teacher, either because of time pressure or because of proficiency problems, may not notice that there is an error; 2) even if the teacher does notice there is an error, he or she may not know how to correct it; 3) even if the teacher does know how to correct it, he or she may not be able explain the reason for the correction to the student; and 4) even if the teacher can both correct and explain the error, the student may not understand—or even may not pay attention to—the explanation. I will have more to say about the third point, and about the role of explanation and explicit knowledge in second language acquisition, later.

I will summarise the remaining parts of Truscott's article more briefly, since it is the issues of research design and theory raised in the earlier half of his article that I am most interested in addressing. In the next part of his paper he enumerates the ways in which error correction might well be harmful to

students: 1) it arouses anxiety, causing discouragement and loss of motivation; 2) it leads students to adopt avoidance strategies in order to avoid being corrected; 3) it wastes time that could be better spent on doing more writing practice; and 4) it diverts students' attention from more important matters such as rhetorical organisation and the logical development of their arguments. In the following section, he claims that, since empirical evidence and theoretical arguments alike show that grammar correction is and must be ineffective, the burden of proof lies with those who argue in favour of correction, not with those who argue against it, and he goes on to argue that the usual reasons given for continuing to correct errors (that students need negative as well as positive evidence, that correction prevents fossilisation, and that students want to be corrected) are not persuasive. The title of the final section of his article—"Grammar correction should be abandoned"—makes his conclusion perfectly clear.

Truscott's critics

In the debate which followed the publication of Truscott's article, a debate which still continues today, Truscott has until recently generally got the best of the argument. There are several reasons for this. Perhaps the most important of these is that his basic claim seemed for a long time to be irrefutable: until the publication of Bitchener (2008), there had been (as far as I know) no study whose research design allowed the researchers to make an uncontroversial claim that they had empirically shown that grammar correction leads to long-term improvements in second-language writers' linguistic accuracy. Three important methodological criteria for a research design which would permit such a claim are: 1) the study should be looking for improvements in grammatical accuracy in new writing by students not in the revision of existing texts; 2) the improvement in accuracy should be retained over time and should not be just the result of short-term memory as measured by an immediate post-test; and 3) there should be a bona fide control group who receive no grammar correction to provide a baseline against which gains (or losses) by the experimental group(s) receiving correction can be measured.

Some research which at first sight seems to show the effectiveness of grammar correction in fact falls down on one or more of these criteria when examined more closely. For example, Bitchener, Young and Cameron's (2005) research design certainly included a control group which received no corrective feedback alongside the two experimental groups (group one receiving written corrective feedback plus a one-to-one mini-conference to discuss the feedback, and group two receiving written corrective feedback only), and their results did appear to show some signs of improvement for group one relative to the control group. Unfortunately, though, the design is plagued by a confounding variable: the three groups were members of language programmes with differing degrees of intensity, group one studying English for 20 hours a week, group two for 10 hours per week, and the control group for only 4 hours per week. Although the authors claim that all three groups spent the same amount of time practising writing each week, this argument hardly seems strong enough to refute the claim that group one's improvement was more likely due to all the extra input and practice they received over the 12 weeks of the course than to the experimental treatment. (See Truscott [2007] for a thoroughgoing critique of Bitchener et al., focusing not only on problems of research design but also on anomalies in the results.)

A further factor is that sometimes the pro-correction argument is not helped by the way in which research results or arguments critical of Truscott are presented. Thus, research conducted without using a control group is sometimes presented as at least suggesting that grammar correction is effective, but even this modest claim needs to be treated with caution. Ferris (2006) is a case in point. In this longitudinal study, which, as Ferris herself admits, addresses the issue of whether different kinds of error respond differently to correction rather than the issue of whether or not “error feedback [is] worth doing at all” (p. 84), students were given feedback on 15 different kinds of error; at the end of the semester, the changes in error rates for the five most common categories were examined. Ferris summarises her results by saying that “students made statistically significant reductions in the total number of errors in five major categories . . . over the semester” (p. 90), a claim repeated by Hyland and Hyland in their survey of feedback studies (2006, p. 85). When her results are looked at more closely, however, it becomes clear that the overall improvement is in fact due to an improvement in one category only (verb errors), and that in two other categories (noun errors and lexical errors) the improvement was too small to be significant, and that in the remaining two categories (article errors and sentence errors) there was actually a (non-significant) decline in accuracy. Thus, while it is certainly true that the cup is one-fifth full, it is equally the case that it is four-fifths empty. Despite the unsatisfactory nature of these results, however, in the conclusion of her paper Ferris provides guidelines to teachers about how to correct errors effectively as if the question of whether feedback is worth doing at all perhaps needs no further discussion.

There is a similar slide towards a possibly unearned conclusion in other contributions by Ferris to the debate. In her response to Truscott’s original paper (Ferris, 1999), it not clear that she is addressing the question Truscott had asked—does grammar correction have positive effects for learning?—since most of her argument seems either just to assume that it does, or (as when she cites Fathman and Whalley [1990] in support of her position) to assume that the point at issue concerns correction having positive effects for helping students attain greater accuracy when revising, a claim which is uncontroversial. She also argues that the studies cited by Truscott as showing non-existent or negative results for error correction are so diverse in terms of subjects, research paradigms, and instructional methods, that they are not comparable; it is therefore impossible, she argues, to use them to support any generalisation. In making this claim, however, it could be argued that she is in fact strengthening Truscott’s position, as he was quick to point out in his reply:

Generalisation is most reasonable when similar results are obtained under a variety of conditions (as they are in this case) and least reasonable when the conditions are similar for all the studies. When consistent results are obtained under consistent conditions, one can reasonably argue that these specific conditions are responsible for these results. But when similar results appear in widely different circumstances, no such explanation is available; the phenomenon is a general one. (1999, p. 114)

Despite these weaknesses of argumentation, however, Ferris ends confidently by putting forward a research agenda concerned with such matters as the accuracy of teachers’ responses to student errors, the

effectiveness of training teachers to respond to errors, the variability of students' responses to correction of different kinds of errors, the effect of individual learner differences on the efficacy of error correction, and which error correction techniques work best. Such a research agenda is based on the assumption—not effectively argued for in her paper—that error correction is indeed worth doing; it thus begs the question which Truscott had asked.

There is a similar move at the end of her later position paper (2004). In this she repeats many of the same arguments to similar effect, but she adds one new argument, in which she refers to work in both SLA and error-correction studies: “existing research *predicts* (but certainly does not conclusively prove) positive effects for written error correction” (p. 50, original emphasis). This is a valuable point—one which I will be discussing further in the next section—and here it is expressed in a suitably tentative manner. However, in the conclusion of her paper this modesty of tone has been replaced by something rather different: “Error treatment, including error feedback by teachers, is a necessary component of L2 writing instruction. We must prepare ourselves to do it competently, we must plan for it carefully in designing our courses, and we must execute it faithfully and consistently” (p. 59). Looking back through her article from this point of vantage, it is not easy to see that her argument has earned her the right to use words as emphatic as “necessary” and “must”.

Truscott does not have things all his own way, however. Bitchener (2008) describes some research which does seem to meet the three methodological criteria mentioned at the beginning of this section. Firstly, in addition to the three experimental groups receiving different kinds of feedback, there was a genuine control group who received no feedback on the targeted category of error, but instead were given a short general comment on content. Secondly, the research assessed the effects of grammar correction on new pieces of writing as well as on students' revision of their initial pieces of writing. Thirdly, the study was longitudinal, and there was a delayed post-test two months after the initial intervention. In other ways also, the experiment was quite well controlled. The subjects had similar profiles (international students in two similar private language schools in New Zealand) and proficiency levels (low intermediate as measured by similar tests), and were following similar curricula before and after the intervention. In addition, the genre of the three pieces of writing done by the students (pre-test, immediate post-test, and delayed post-test) was controlled; in all three cases the students were asked to do a picture description task. Perhaps the most striking new feature of the design, however, was that Bitchener, taking a leaf out of the book of researchers working on oral feedback, targeted a single category of error, in this case the use of the indefinite article for the first mention of an object and the definite article for subsequent mentions; one argument for this innovation is that the usual method of correcting *all* errors is so scattershot by nature that it is unlikely that any measurable difference in accuracy would result from it in the short term.

The results of the experiment were encouraging. There was a significant difference between scores on the pre-test and the immediate post-test for the experimental groups, and that level of accuracy was retained in the delayed post-test two months later. Furthermore, group one (who received direct correction together with oral and written instruction on the grammar point) and group three (who received direct correction only) performed significantly better than the control group—although group two (who received

direct correction and written metalinguistic explanation) did not. Bitchener does not offer an explanation for this last, slightly odd, result.

These results suggest that, when sufficiently focused, corrective feedback can promote linguistic accuracy in new pieces of writing by students. There are, however, limitations to the study. One is that it is very narrowly—perhaps too narrowly—focused and is therefore difficult to generalise from: do these results also apply to other categories of error, especially those affecting linguistic features which are less easily teachable and learnable than *a/the* for first and subsequent mention? Another is that there may have been other factors during the two months between the immediate and the delayed post-tests which might have affected the result. This kind of contamination seems impossible to fully guard against in longitudinal classroom research, but at least in this case the fact that all the subjects were following very similar curricula during those two months suggests that any potential threat to validity is not fatal. The pro-correction lobby can therefore perhaps give this piece of research a cautious welcome.

Truscott also does not necessarily make all the running in his exchange with Chandler (Chandler 2004, 2009; Truscott, 2004, 2007, 2009). In the original piece of research which prompted this exchange (2003), Chandler compared the changes in accuracy over one semester by two groups. Both groups wrote five five-page chapters of an autobiography and had the errors in their writing underlined; the difference between the two groups was that one group was required to correct their errors before drafting their next chapter while the other group was not, revision of all the second group's chapters being reserved until after the end of data collection, that is, after the submission of the fifth chapter. (The reason for this arrangement was that Chandler felt it was ethically unjustifiable to deprive one group of feedback after the results of a questionnaire had informed her that the majority of her students strongly wanted her to correct every error.) After the submission of the first draft of the fifth chapter by both groups, data collection ceased, the second group corrected their errors in all their five chapters, and both groups then proceeded to write the second (and final) drafts of all five chapters. A comparison of the error rate in the first drafts of the first and fifth chapters showed that the immediate correction group went from an average of 7.8 errors per 100 words in the first chapter to 5.1 errors per 100 words in the fifth chapter, a statistically significant change equivalent to a reduction of about 7 errors per page in a five-page paper. The delayed correction group, in contrast, showed a small, non-significant decline in accuracy.

The main point of contention between Chandler and Truscott is whether or not the second group constitutes a control group. According to Truscott (2009), it does not: both groups received correction (in the sense that their errors were marked by the teacher). According to Chandler (2009), it does: the students in the second group paid no attention to the underlining by the teacher. As Truscott points out, he and Chandler are using different definitions of the word "correction", Truscott taking it to mean the teacher's action of marking errors, and Chandler taking it to mean the students' action of correcting those errors. Truscott maintains that the difference between Chandler and himself is therefore illusory rather than substantial, and continues to maintain that the second group received correction (in his sense) and therefore cannot be a control group.

Here it seems to me that Chandler has the best of the argument—assuming, that is, that we can

believe her statement that in the second group “nobody gave any indication of paying any attention to my underlining” (2009, p. 57). Any change in accuracy caused by corrective feedback, whether that change is for the better or for the worse, can presumably only occur if the students actually notice the feedback. The mere physical marking of the sheet of paper by the teacher makes no difference; it is whether or not students pay attention to those marks on the paper, and whether or not they try to process the information they convey, that will make a difference to their interlanguage and thus to their future language use—or, of course, will fail to make a difference if Truscott is right about error correction being an inappropriate language learning strategy. Regardless of which way it goes, however, attention is the construct in question, not red ink. Truscott’s claim that the second group received correction therefore seems somewhat misplaced.

A similar point can be made about his argument that the error correction actively harmed the second group and was the cause of the decline in their accuracy; it seems difficult to believe that feedback that was not noticed by the students could have had any effect one way or the other. It thus seems that Chandler’s work is perhaps a little more robust than Truscott gives her credit for.

Theoretical issues

As things stand, therefore, the debate has not been settled one way or the other, and if anything Truscott seems to have the advantage; with the exception of Chandler (2003) and Bitchener (2008), there is a distinct lack of empirical support for the pro-correction position. In one sense this is not surprising. Ferris has pointed out one of the key difficulties inherent in doing convincing research in this area, saying that it amounts to a methodological “Catch 22”:

If an experimental study with a control group is done . . . it is criticised for not being longitudinal. (“Sure, students edit more accurately from one draft to the next of the same paper, but how do we know correction has any effect over time?”) However, when a longitudinal study is done, it is critiqued for not being controlled enough. (“Other factors besides correction could have caused students’ improvements in accuracy.”) (Ferris, 2004, p. 56)

Although this is probably intended as an indirect criticism of Truscott, she has nevertheless put her finger on a key problem in much SLA research, a problem that is always likely to make results in the field rather tentative. Nevertheless, such threats to validity can be at least reduced by careful research design, and presumably more convincing studies will appear in future.

In the meantime, however, there is nothing to stop us addressing the theoretical issues raised by Truscott. As I mentioned earlier, Truscott gives three reasons “why grammar correction cannot work” (to quote the title of the relevant section of his article): 1) the use of error correction assumes that learning consists of the transfer of information from teacher to student, which is not how language learning works (the transfer-of-information argument); 2) the existence of acquisition orders and developmental sequences means that learners will not benefit from grammar correction until their internal syllabus allows them to do so, and there is no way for a teacher to know when any individual student is ready in this way (the

developmental sequence argument); and 3) grammar correction is likely to produce only learned, explicit, metalinguistic knowledge and thus result in what he calls “pseudolearning” rather than genuine language acquisition; that is, students will end up with increased knowledge about language rather than increased ability to use the language fluently and effectively (the pseudolearning argument).

In this section I will question all three of Truscott’s arguments and claim rather that there are sufficient theoretical reasons, arising from work in the fields of SLA (in both its cognitivist and its sociocultural forms) and of cognitive psychology, for us to predict that the provision of corrective feedback is likely to have benefits both for learners’ language acquisition and for the development of their writing skills. However, when putting forward these counter-arguments to Truscott, it is important not to claim too much: to articulate the arguments fully would require discussion of very large issues, and in the space available I can do no more than offer a cursory sketch. Furthermore, rehearsing such arguments cannot, of course, “prove” that written grammar correction does irrefutably lead to quantifiable gains in linguistic accuracy. Rather, the points are being offered in the spirit of Ferris’s (2004) claim that existing research predicts (although it does not prove) positive effects for written error correction, and that therefore it is worth doing further research to test this prediction.

The transfer-of-information argument

Let us begin by looking at Truscott’s transfer-of-information argument. He claims that the standard view of correction is based on “a simplistic view of learning as essentially the transfer of information from teacher to student,” and he goes on to characterise this view of correction as follows:

Learners find out that they are wrong in regard to a particular grammatical structure and are given the right form (or directions for finding it); they then have correct knowledge about that structure, so they should be able to use it properly in the future, assuming only that they understand and remember the correction. (Truscott, 1996, p. 342)

He goes on to say that this is clearly a false view, that “teaching practices that rely on transfer of knowledge, without any concern for the processes underlying the development of the language system, are not promising,” and that therefore “teachers should not expect grammar correction to work” (pp. 342-343).

This argument immediately raises the question: is there anyone who actually believes that language learning is “essentially the transfer of information from teacher to student”? It is difficult not to suspect that here Truscott is setting up a straw man. The idea that second language acquisition is a gradual, variable, often unpredictable process involving backsliding and U-shaped curves of development is axiomatic in SLA, and it is unlikely that there are any experienced language teachers who believe that languages are learned by students instantaneously appropriating transferred information, yet SLA researchers and experienced teachers alike continue to put forward reasons for thinking that corrective feedback can indeed be effective. In other words, the belief that correction might be effective does not necessarily require a belief that language learning is merely a matter of transfer of information, and it is quite possible to believe that the process of language acquisition is gradual and complex *and* to believe that corrective feedback

may aid that process.

Why, then, does Truscott claim that corrective feedback is incompatible with the process of language acquisition? He does not describe in detail his views about how the acquisition process works, but perhaps one influence is Krashen, who famously did not believe that conscious attention to or noticing of linguistic form—or therefore, *a fortiori*, error correction—played any significant role in language acquisition. Krashen (1981, 1982) claimed that there was a fundamental difference between consciously learned knowledge and unconsciously acquired knowledge of a second language, and that it was the latter that was crucial for effective use of the language. Further claims were that comprehensible input pitched just above the learner's current proficiency level was not only necessary but also sufficient to trigger the unconscious processes of acquisition, and that explicit, learned knowledge could not be transformed into implicit, acquired knowledge and was only useful for monitoring. (This learned knowledge is the kind referred to by Truscott as “pseudoknowledge”.) The key point in the current context is that Krashen claimed that the crucial process of acquisition (as opposed to learning) was an unconscious one. If Krashen is right, it would indeed be pointless to draw learners' attention to their errors since, according to his view, all that is necessary for successful language acquisition is plenty of positive evidence (evidence of what is grammatical in the target language); the provision of negative evidence (evidence of what is not grammatical in the target language) in the form of corrective feedback would be redundant, if not counter-productive.

Krashen's claims were controversial even at the time, and among the many responses to them, Schmidt's Noticing Hypothesis (Schmidt, 1990, 2001) is one of the most helpful, both in general terms and, more specifically, in developing an argument that conscious attention to language form is helpful for language acquisition, and that therefore corrective feedback, as a way of drawing learners' attention to particular forms, has a role to play in the language classroom. Schmidt's hypothesis originated in a case study of his own learning of Brazilian Portuguese (Schmidt & Frota, 1986), during which he kept a diary and noted down any linguistic forms he noticed being used by the people he was talking to; in addition, his conversational output was recorded at regular intervals, and the transcripts of these conversations were checked to see which new forms appeared in his spontaneous speech. In almost all cases the new forms were those he had consciously attended to in the speech of people talking to him, while other forms that were present in the input, and which were comprehensible to him, did not appear until after he had noticed them. Developing this insight by drawing on work in cognitive psychology, he concluded that “learning, in the sense of establishing new or modified knowledge, memory, skills, and routines is . . . largely, and perhaps exclusively, a side effect of attended processing” (2001, p. 29). If this is so, there will be a useful role for corrective feedback in language learning since this is one way of making the correct forms of the language salient to learners and increasing the chance that they will pay conscious attention to them.

Most of the research which has been done in this area has concerned oral corrective feedback provided to learners in classrooms where the focus is on the speaking skill, but clearly at least some of the insights gained in this setting are transferable to the writing classroom. In this research corrective feedback has been categorised according to whether it is input-providing or output-prompting (Ellis, 2008, p. 227).

Input-providing feedback provides positive evidence, and consists of such moves as recasts (where the teacher rephrases a learner's utterance in order to make it match the correct target-language form) or confirmation checks; the equivalent of a recast in the written mode would be direct correction, where a teacher provides a correct form to a learner. This kind of feedback in fact functions as a form of enhanced input, which can be defined as positive evidence which has been highlighted by the teacher in some way in order to make learners more likely to notice it.

Output-prompting feedback, on the other hand, provides negative evidence, and consists of such moves as requests for clarification, repetitions of learners' erroneous utterances (usually with added stress and a rising intonation), or metalinguistic comments of some kind (for example, "You need to use the past tense"); the equivalent in the written mode of these kinds of output-prompting feedback would be the various forms of indirect correction, such as the underlining or coding of errors, or the provision of metalinguistic information. In all these cases, the teacher does not provide the correct form for the learner, who must attempt to produce it himself or herself; Swain (1995) refers to this as "pushed output", and argues that it produces benefits for acquisition by forcing the learner to pay close attention to the forms of the target language.

A considerable amount of experimental research has been done in oral settings into whether or not corrective feedback is effective for learning, and if so, which kind is most effective. Much of this research is methodologically plausible, the research design including a control group, a delayed post-test, and the testing of whether what has been learned through the feedback can be generalised and systematically applied to new items. The results are mixed, but a number of studies do clearly show medium-to long-term benefits arising from the use of one kind of corrective feedback or another. (See Ellis, 2008, pp. 884-889, for a survey of work done in this area.) A key point in the current context is that this research is certainly not based on the simplistic view of language acquisition which Truscott has described, its central construct being "attention to form" rather than "transfer of information".

It seems, then, that arguments in favour of the effectiveness of corrective feedback do not rely, as Truscott claims they do, on a belief that language learning is a matter of the transfer of information; an approach based on the notion of noticing provides not only a way of reconciling claims for the efficacy of corrective feedback with the known variability and complexity of the acquisition process, but also, more significantly, a reason to think that corrective feedback has an important—or, more cautiously, at least a highly facilitative (Long, 2007)—role to play in interlanguage development. In work influenced by Schmidt's Noticing Hypothesis, and especially in work in the focus-on-form tradition (Doughty & Williams, 1998; Long, 1991), acquisition is not at all seen as being effected by the transfer of information from teacher to learner, but rather by the cognitive action of the learner—by the way he or she notices the forms of the target language, and notices the gap between those correct forms and the ones he or she has produced.

The developmental sequence argument

Turning now to Truscott's developmental sequence argument, his main claim is that problems arise

when instructional sequences, including the provision of feedback, are inconsistent with natural developmental patterns. Such patterns include acquisition orders (of different features of the language, for example, progressive *-ing* or possessive *-s*, the former of which is usually acquired before the latter) and developmental sequences (for example, the sequence of transitional structures employed by learners at various stages on their way to full mastery of question formation or negation); early SLA research showed that both these kinds of developmental pattern occur in second as well as in first language acquisition (see Ellis, 2008, chap. 3, for a summary of work in this area). Given the existence of these developmental patterns, Truscott argues that “when students are corrected on a point for which they are not yet ready, the correction is not likely to have much value” (1996, p. 344); he further argues that, since teachers are not in position to know which stage in a developmental sequence any particular student has reached, it is impossible for them to tailor corrective feedback to match the readiness of students with any accuracy. There is clearly much truth in both these claims.

There are, however, some available counter-arguments. Truscott is clearly not concerned with students at an elementary level of proficiency since he argues that grammar correction diverts the attention of teachers and learners from the more important matters of discursive organisation and the logical development of arguments (pp. 355-356). However, if the students are advanced enough to be writing compositions in which these are the key areas of concern, it is likely that they mostly make grammatical mistakes not because the grammar point in question is new to them, but because it has only been partially learned and has not yet been fully appropriated.

Lee (1997) provides some support for this position. In her study, three groups of learners were each provided with a text containing the same 20 common errors. In the case of the first group, all the errors were underlined; in the case of the second group, lines of the text which were error-free were indicated with a tick in the margin; in the case of the third group, the learners were not given any clues to the location of the errors. All three groups were asked to correct any errors they could find, and the result was that the learners in group one did significantly better than those in the other two groups. Lee explains this outcome by arguing that the students’ problem was not a deficit in knowledge—when students were helped to find an error they generally did rather well at correcting it—but their inability to detect the error without assistance. In other words, the underlining had the effect of triggering pre-existing but not yet fully appropriated knowledge. Aljaafreh and Lantolf, in their classic ethnographic study of three novice writers (1994), noticed something similar: when the participants in their research read through their compositions by themselves, they were unable to detect any errors; as soon as they began to receive some help from their tutor, however, they were not only able to detect errors which they had overlooked when working on their own, but also were often able to correct those errors.

The point being made here is that Truscott’s developmental sequence argument might work better if what we were talking about was entirely new knowledge. When learners have already acquired some knowledge but are unable to use it without assistance, a clear case can be made for intervention on the part of the teacher, especially if the intervention is in the form of indirect corrective feedback. Such intervention does not work by providing new information to the learner, but rather has the effect of causing the learner

to “attend to the retrieval from long-term memory of previously encoded representations, retrieving either an alternate exemplar or a rule for computing a more targetlike form,” as Lyster puts it (2004, p. 406). Lyster goes on to argue that doing this stimulates the development of strong connections in memory, thus increasing the likelihood of the item in question being retrieved again in future. Corrective feedback can thus play an important role in moving a learner through what Vygotsky (1978) called the Zone of Proximal Development (ZPD)—the zone between what a learner can do unassisted (the actual level of development, such as might be measured by a test), and what he or she can do with the assistance of a more expert other (the potential level of development).

In other words, provided that initial appropriation of a target item has already taken place—which is very often the case with intermediate or advanced learners—practice at retrieving that item makes a difference, and corrective feedback can stimulate such repeated practice and thus lead to a gain in control over the item. When Truscott writes about developmental sequences, he seems to imply that learners are either ready to acquire a new feature, or they are not; his position seems to be that, given readiness, acquisition will be swift and complete, and further, that without readiness acquisition will simply not occur. (If this is in fact his view, it sits a little oddly with his insistence when making the transfer-of-information argument that “the acquisition of a grammatical structure is a gradual process, not a sudden discovery” [1996, p. 342].) It seems clear, however, that there are in fact many gradations of developmental readiness. Any specific linguistic feature can be high or low in a student’s ZPD, and acquiring and gaining control over that feature is not an open-and-shut, all-or-nothing matter; assistance from a teacher, including the provision of corrective feedback, can help a student gradually transform one level of development, in which errors are made and assistance is needed to identify and correct those errors, into a new and more advanced level of development, in which the learner’s performance is largely self-regulated and error-free.

The participants in Aljaafreh and Lantolf’s (1994) study showed clear signs of effecting such a transformation with the assistance of their tutor. For example, one of them moved through five stages of development in her control of modal + main verb constructions: 1) in her tutorial in week 1, the learner could not see her error (*can’t lived*) and, after a long exchange, had to be given the correct form; 2) later in the same tutorial, there was a shorter exchange about *can’t went*, during which the tutor indirectly guided the learner to the correct form; 3) in her new composition in week 2, the learner began to mark the modal for tense and produced *couldn’t took*; in her tutorial she was quickly able to correct the error in the marking of the main verb after only minimal prompting by the tutor; 4) in her new composition in week 3, she correctly produced *could not ask* and *could not get*, and also extended the pattern to the affirmative *could see*; 5) and finally, by week 7, she was not only using the construction correctly with various main verbs, she was also extending the pattern to another modal (*would*) (Aljaafreh & Lantolf, 1994, pp. 478-480). This is a good example of the gradual development of control over a tricky grammatical feature achieved with the assistance of corrective feedback by the tutor.

The students in Aljaafreh and Lantolf’s study were, of course, learning in near ideal conditions: one-to-one tutorials with a tutor who was carefully tailoring his feedback to the developmental level of each

individual learner. Written error correction—Truscott’s target—is inherently a more coarse-grained form of assistance than an oral tutorial, and, if provided to a large class, can be rather crude in terms of responding to the developmental levels of individual learners. Moreover, it is certainly true that if corrective feedback is targeted at a feature which is indeed far beyond what a learner is ready for, it is not likely to have any effect (Mackey & Philp, 1998).

In spite of this, however, it can be argued that in any class that is even approximately homogenous in proficiency, many errors will fall roughly within the ZPD of many of the learners, and an experienced teacher who has been carefully listening to the talk of his or her students, and attentively reading their written work, is likely to have an intuitive sense of which corrections might “take” and which might not. It is true, of course, that some pieces of feedback will miss their mark, but others will score a bull’s-eye, as Ellis and Sheen put it in their discussion of learner factors affecting the use of recasts in form-focused classrooms (2006, p. 591). Thus, if a teacher provides extensive corrective feedback which is roughly tuned to the learners’ developmental level, at least part of it is likely to be taken up by learners in the short-term, and to be cumulatively effective in establishing greater control over language forms in the medium to long term.

It can thus be argued that, in spite of problems associated with developmental sequences, there are indeed theoretical reasons for thinking that corrective feedback can work, even though it is clear that there are also practical reasons for thinking that it cannot always work. The practical problems associated with matching feedback to learners’ states of readiness are not, however, so overwhelming that we need to say that corrective feedback can never work. Truscott’s position, however, is more single-minded: he has consistently argued that there are theoretical reasons for thinking that it cannot work at all, and that therefore the practice should be abandoned. If my argument so far carries any weight, however, and if it is in fact plausible that corrective feedback can work at least some of the time, and that it can have a cumulative effect, teachers are surely justified in continuing to use it; it is hardly reasonable to argue that because such feedback does not work all the time it should therefore never be used at all.

The pseudolearning argument

Truscott’s final theoretical objection to grammar correction consists of the pseudolearning argument. Truscott defines pseudolearning as the kind of learning which produces only “a superficial and possibly transient form of knowledge, with little value for the actual use of the language” (p. 345). He discusses the pseudoknowledge produced by this kind of learning in terms of Krashen’s distinction (described earlier) between unconsciously acquired, implicit knowledge and consciously learned, explicit knowledge, and repeats the argument that the latter is only useful—if it is useful at all—in monitoring contexts. In characterising pseudoknowledge, he uses the terms “explicit knowledge”, “metalinguistic knowledge”, and “knowledge about language” (as opposed to “knowledge of language”), and claims that it is exactly these kinds of knowledge which corrective feedback produces.

There are two questions which need to be asked in response to this. Firstly: is it true that corrective feedback can produce only explicit knowledge? And secondly: is it true that explicit knowledge has no

useful role to play in acquisition? These are big questions, but in both cases, the answer seems to be broadly no.

To deal with the first question first, it is certainly possible that corrective feedback might produce explicit knowledge, especially if the feedback includes a metalinguistic explanation of the nature of the error in question. However, many kinds of feedback—recasts, confirmation checks, clarification requests, repetitions, or elicitations in the oral mode, and direct correction, coding, or underlining in the written mode—include no metalinguistic component. In the case of the input-providing forms of feedback, such as recasts (or direct correction in the written mode), their role is not to convey explicit knowledge of abstract rules but to provide instances of enhanced comprehensible input—enhanced because they draw the learner’s attention to target language forms, and thus lead the learner to notice the gap between the correct form and his or her own interlanguage output, and comprehensible because the learner already understands the message before correction begins since it is his or her own message (Long, 2007). Recasts (and direct correction) are thus more likely to facilitate form-function mapping than to establish or consolidate explicit knowledge.

The role of the output-prompting forms of feedback, such as repetitions (or underlining in the written mode), on the other hand, is to stimulate learners to produce new, pushed output (Swain, 1995); in other words, the aim, again, is not to convey metalinguistic knowledge, but to cause learners to try to retrieve a previously encoded representation of a more target-like form from long-term memory (Lyster, 2004). Learners may—or may not—have conscious recourse to a rule during this retrieval process, but such use of a metalinguistic strategy is not required by the process, and the outcome of the corrective sequence consists of new and (probably) more target-like output, and not necessarily the learning or reinforcing of an explicit rule. The aim of this kind of feedback is the creation of stronger connections in memory, leading to greater likelihood of the correct form being effortlessly retrieved in future.

Input-providing and output-eliciting feedback alike are thus more likely to draw upon and reinforce implicit knowledge than to produce explicit knowledge, and this seems to be true even in the case of overtly metalinguistic feedback. Indeed, in oral feedback research, the provision of explicit metalinguistic commentary or explanation is usually seen as being an output-prompting form of feedback; in other words, even metalinguistic cues are seen in terms of prompting pushed output rather than of enhancing explicit knowledge about language. Further, in Ellis, Loewen, and Erlam’s (2006) study of the comparative effects of recasts and corrective metalinguistic cues on the acquisition of past tense *-ed*, it was found that the metalinguistic feedback not only led to gains on a delayed post-test which had been specifically designed to measure implicit rather than explicit knowledge, it also led to greater gains on that test than did the use of recasts, which are usually seen as being a more implicit form of feedback and therefore as more likely to lead to gains in implicit knowledge. This result suggests that corrective feedback, whatever form it takes, even that of metalinguistic explanation, does not necessarily lead to gains only in explicit knowledge about language.

Turning now to the second question asked at the beginning of this section—is it true that explicit knowledge has no useful role to play in acquisition?—Truscott’s answer would seem to be yes. He

addresses the issue of metalinguistic knowledge most thoroughly in the section of his article concerned with the practical problems associated with providing corrective feedback (pp. 349-354). His basic argument, following Krashen, is that the rules of English, or of any language, are so complex and so ill-understood even by professional linguists that there is little chance that a language teacher will be able to explain “the actual grammar of English” (p. 350) adequately to students, and that even if he or she does succeed in this, there is no guarantee that the students will understand the explanation.

An initial point to make in response is that in this section of his article Truscott seems to slide from discussing grammar correction (which presumably involves various kinds of feedback) to discussing grammar explanation; he writes almost exclusively about the problems associated with the latter, and says very little about any other kind of feedback, almost as if corrective feedback and grammar explanation were exactly the same thing. There is thus a danger of circularity in his argument: clearly, if grammar correction consists exclusively of complex metalinguistic explanation, it would hardly be likely not to produce some metalinguistic knowledge. A second point is that it is of course true that even linguists have an imperfect understanding of the rules of English. However, the kind of rules that a teacher might use to help students grasp a language feature, or that learners might employ to guide their use of the target language, do not—and do not have to—approach a professional linguist’s level of sophistication; they are much more like rules of thumb, and their basic aim is to provide scaffolding for practice, not to be an adequate description of the “actual grammar” of English.

The most important point to make, however, is that there are good reasons to think that explicit, learned knowledge of language does indeed play an important role in the acquisition process of adult learners. DeKeyser (2000), in an article reporting on his replication and refinement of Johnson and Newport’s classic study investigating the Critical Period Hypothesis (Johnson & Newport, 1989), argues persuasively that, since the capacity of adult learners for implicit learning has been reduced by age effects, they therefore have to rely on more explicit, formal, and memory-based kinds of learning than is the case in first language acquisition.

In a series of publications (1997, 1998, 2001, 2003, 2007), DeKeyser has explored how this kind of learning works. The basic question is: once a linguistic feature has been noticed by a learner (either as a result of spontaneous attention to naturalistic input or as a result of classroom instruction), what is he or she to do with it in order to be able to use it fluently and correctly? Drawing on elements of skill acquisition theory from the field of cognitive psychology, and specifically on Anderson’s Adaptive Control of Thought (ACT) theory (Anderson, 1993, 2000), DeKeyser argues that this can be done through a three-stage process: 1) the learning of declarative knowledge (that is, conscious knowledge of a fact, for example, the fact that regular verbs in English form their past tense by adding *-ed*); 2) the proceduralisation of knowledge (procedural knowledge is declarative knowledge which has been encoded as behaviour); and 3) the automatisisation or fine-tuning of procedural knowledge through practice.

The performance of the target behaviour in the early stages of this process is slow, laborious, often erroneous, and requires a considerable investment of cognitive resources as the learner attempts to guide his or her behaviour by conscious use of declarative knowledge. As proceduralisation continues, however,

the behaviour, which originally consisted of a series of small actions each performed with conscious attention, begins to become more fluent as those small actions are packaged into larger chunks. (An example from a non-linguistic domain would be the transition, when learning how to change gear in a car, from making a series of discrete, consciously controlled movements—accelerator up, clutch down, gear-stick forward, gear-stick left, gear-stick forward, clutch up, accelerator down—to three basic actions—feet, hand, feet—and then to a single, seamless behaviour [Anderson, 2000, pp. 330-331]). When the knowledge has finally been fully automatised, the result is fast, fluent, and accurate behaviour which does not need conscious thought. (In terms of the driving analogy, one can change gear without thought while having a conversation with the person in the passenger seat.) Once this stage has been reached, the declarative knowledge that was useful at the start of the process may be—but is not inevitably—lost.

Anderson's ACT theory was, of course, not initially designed to explain language acquisition; clearly, it works well as an explanation of how a series of actions can become organised into a motor programme, but equally clearly, language learning is not just a matter of developing motor programmes. Despite this, however, the theory does work well as an explanation of how practice may lead to fluent language use, as a learner "engag[es] in the target behaviour—or procedure—while temporarily leaning on declarative crutches," or, in other words, "convey[s] a message in the second language while thinking of the rules" (DeKeyser, 1998, p. 49), until, as automatisisation proceeds, the declarative knowledge ceases to drive the behaviour, and implicit knowledge is doing the job. The theory also works well as an explanation of how a language form which is low in a learner's ZPD may be moved, by means of cooperation and attention, including attention to declarative knowledge, through the ZPD until it has been fully appropriated.

Such a theory also clearly allows corrective feedback a useful role, its function being to act as guidance for the practice of the target behaviour. Again, something can perhaps be learned from work in cognitive psychology, such as the research into the effects of feedback on motor learning summarised by Salmoni, Schmidt, and Walter (1984). Generally, giving feedback 100% of the time has been found to lead to better performance on an immediate post-test, but these gains are not maintained at the delayed, transfer stage (that is, when the subjects are asked to generalise the learning to new items some time after the end of the training period); Salmoni et al. argue that this is because the subjects in this condition become too dependent on the feedback and do not adequately develop their own internal representation of the task. Subjects who receive intermittent feedback, on the other hand, perform less well than the intensive feedback group on an immediate post-test but better at the delayed, transfer stage. This suggests that the role of feedback during practice is not to alter behaviour in any simplistic, behaviourist sense, but to help the learners update their internal representation of the target procedure as the practice proceeds. Thus, although it cannot be said that corrective feedback itself directly causes acquisition or an increase in control over a target feature—it is attention, and practice guided by the internal representation of the feature, which do that—the feedback can be very useful in helping learners fine-tune that representation as they go about the business of proceduralising and automatising their knowledge.

In summary, then, there is sufficient reason to believe that explicit knowledge can play an important role in second language acquisition, especially for adult learners whose capacity for implicit learning has

been reduced by the effects of age. If this is so, the metalinguistic knowledge which learners gain from corrective feedback which includes metalinguistic explanation, and even the metalinguistic knowledge which they might be able to induce from less explicit kinds of feedback, can, if it is used to aid practice, bring with it long-term benefits for language acquisition. There seems no reason to believe, pace Krashen, that such explicit knowledge about language cannot, through a process of proceduralisation and automatization, be transformed into implicit knowledge of language, nor does there seem any need to characterise the learning process outlined by DeKeyser as pseudolearning.

Conclusion

This article has not tried to offer new evidence for the efficacy of written corrective feedback. It has also not attempted to strengthen the case for such feedback by offering new interpretations of existing empirical research; it seems impossible not to concede that the research record to date (certainly as far as writing studies are concerned) tends to validate Truscott's position, a state of affairs which, as Ferris (2004) pointed out, is at least partly due to difficulties inherent in research design in this area. What this article has attempted to do, however, is to suggest that Truscott's theoretical reasons for advocating the abandonment of written corrective feedback are not as strong as they might at first appear.

Does feedback, then, have a future? I would suggest that there are good grounds for thinking that it does, both as a topic for further investigative research and as a classroom practice. Truscott's critique seems in part to be a slightly belated product of a specific historical moment in the history of SLA, what might be called the moment of Krashen. As such, it chimes interestingly with a different discourse of roughly the same era, that of the Writing Centre movement. In a foundational text of that movement, North (2001, originally published in *College English* in 1984) wrote of the struggle to persuade people that writing centres were not just "fix-it shops" (p. 68). His frustration is one that can be understood by every writing teacher or tutor; if students see themselves (or their teachers see them) as passive recipients of correction, and if they think the job of the writing teacher or tutor is just to "fix" the grammar of their texts for them, clearly nothing of interest either for language acquisition or for the development of the writing skill is going on. As Truscott points out, it is no surprise that teachers should, through the use of corrective feedback, be able to help students revise existing texts; his claim is that this has no effect on the long-term development of their writing ability. North made a very similar point—and created a motto for the Writing Centre movement—when he wrote: "Our job is to produce better writers, not better writing" (p. 69).

Given conditions in the 1980s—lingering behaviourism in language teaching, the role of writing centres being seen as merely remedial—the philosophy encapsulated in North's axiom was a valuable one, and it remains valuable today insofar as it helps us to keep in mind that grammatical accuracy is not by any means the only important issue in writing. On the other hand, it is difficult to see how teachers could help students become better writers other than by helping them to produce better writing. If corrective feedback is without doubt one way of helping them do better writing, there are also good reasons to believe that it may help them to become better writers, and more fluent and accurate language users, as well. Whether or not it does so depends largely, however, on the quality of the students' attention to the feedback, what they

do with it after they have attended to it, and how motivated they are to learn from it. Red ink by itself does nothing. Perhaps in the end, as Guénette (2007, p. 52) comments, the crucial variable affecting corrective feedback is student motivation. If this is so, following Truscott's advice may not be the best strategy for writing teachers; rather than trying to persuade students that it is to their advantage to learn to write in a correction-free environment, a better option might be to try to further refine the teacherly skill of inspiring novice writers to pay close, interested (and unthreatened) attention to the potentially useful red ink on their papers.

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