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Corrective Feedback and Teacher Development

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This article examines a number of controversies relating to how corrective feedback (CF) has been viewed in SLA and language pedagogy. These controversies address (1) whether CF contributes to L2 acquisition, (2) which errors should be corrected, (3) who should do the correcting (the teacher or the learner him/herself), (4) which type of CF is the most effective, and (5) what is the best timing for CF (immediate or delayed). In discussing these controversies, both the pedagogic and SLA literature will be drawn on. The article will conclude with some general guidelines for conducting CF in language classrooms based on a sociocultural view of L2 acquisition and will suggest how these guidelines might be used for teacher development.

INTRODUCTION

The role of feedback has a place in most theories of second language (L2) learning and language pedagogy. In both behaviorist and cognitive theories of L2 learning, feedback is seen as contributing to language learning. In both structural and communicative approaches to language teaching, feedback is viewed as a means of fostering learner motivation and ensuring linguistic accuracy. This article will draw on research in second language acquisition (SLA) and language pedagogy in order to examine a number of controversial issues relating to one type of feedback—corrective feedback.

Feedback can be positive or negative. Positive feedback affirms that a learner response to an activity is correct. It may signal the veracity of the content of a learner utterance or the linguistic correctness of the utterance. In pedagogical theory positive feedback is viewed as important because it provides affective support to the learner and fosters motivation to continue learning. In SLA, however, positive feedback (as opposed to negative feedback) has received little attention, in part because discourse analytical studies of classroom interaction have shown that the teacher's positive feedback move is frequently ambiguous (e.g., "Good" or "Yes" do not always signal the learner is correct, for they may merely preface a subsequent correction or modification of the student's utterance). Negative feedback signals, in one way or another, that the learner's utterance lacks veracity or is linguistically deviant. In other words, it is corrective in intent. Both SLA researchers and language educators have paid careful attention to corrective feedback (CF), but they have frequently disagreed about whether to correct errors, what errors to correct, how to correct them, and when to correct them (see, for example, Hendrickson, 1978 and Hyland & Hyland, 2006).

Corrective feedback constitutes one type of negative feedback. It takes the form of a response to a learner utterance containing a linguistic error. The response is an other-

initiated repair and can consist of (1) an indication that an error has been committed, (2) provision of the correct target language form, (3) metalinguistic information about the nature of the error, or any combination of these (Ellis, Loewen, & Erlam, 2006). CF episodes are comprised of a trigger, the feedback move, and (optionally) uptake, as in this example of a CF episode from Ellis and Sheen (2006), where the teacher first seeks clarification of a student's utterance containing an error and then recasts it, resulting in a second student uptaking the correction.

- (1) S1: What do you spend with your wife?
 T: What?
 S1: What do you spend your extra time with your wife?
 T: Ah, how do you spend?
 S2: How do you spend

CF episodes can be simple, involving only one corrective strategy, or complex, involving a number of corrective moves (as in the example above) and also further triggering moves.

This article will examine a number of controversies relating to how corrective feedback has been viewed in SLA and language pedagogy. It will then examine a particular approach to correcting errors based on sociocultural theory, arguing that this constitutes a promising way of addressing some of the problems identified in the earlier sections. Finally, some general guidelines for conducting CF in language classrooms will be presented and some suggestions advanced as to how these might be used for teacher development.

CONTROVERSIES REGARDING CF

The controversy concerning CF centers on a number of issues: (1) whether CF contributes to L2 acquisition, (2) which errors to correct, (3) who should do the correcting (the teacher or the learner him/herself), (4) which type of CF is the most effective, and (5) what is the best timing for CF (immediate or delayed). These controversies will be discussed by drawing on both the pedagogic and SLA literature and by reference to both oral and written CF.

The efficacy of CF

The value attributed to CF in language pedagogy varies according to the tenets of different methods. Thus, in audiolingualism “negative assessment is to be avoided as far as possible since it functions as ‘punishment’ and may inhibit or discourage learning,” whereas in humanistic methods “assessment should be positive or non-judgmental” in order to “promote a positive self-image of the learner as a person and language learner,” and in skill-learning theory “the learner needs feedback on how well he or she is doing” (Ur, 1996, p. 243). However, in the post-method era, language teaching methodologists are less inclined to be so prescriptive about CF, acknowledging the cognitive contribution it can make while also issuing warnings about the potential affective damage it can do. Ur recognized that “there is certainly a place for correction” but claimed “we should not

over-estimate this contribution” (because it often fails to eliminate errors) and concluded that she would rather invest time in avoiding errors than in correcting them—a position that accords with a behaviorist view of language learning. Other methodologists, however, distinguish between “accuracy” and “fluency” work and argue that CF has a place in the former but not in the latter. Harmer (1983), for example, argued that when students are engaged in communicative activity, the teacher should not intervene by “telling students that they are making mistakes, insisting on accuracy and asking for repetition” (p. 44). This is a view that is reflected in teachers’ own opinions about CF (see, for example, Basturkmen, Loewen, & Ellis, 2004). Harmer’s advice has the merit of acknowledging that CF needs to be viewed as a contextual rather than as a monolithic phenomenon. However, as we will see later, SLA researchers—especially those working within an interactionist framework (see, for example, the collection of papers in Mackey, 2007)—take a different view, arguing that CF works best when it occurs in context at the time the learner makes the error.

The above comments pertain to oral CF. But similar differences in opinion exist where written CF is concerned, as is evident in the debate between Truscott and Ferris (Truscott, 1996, 1999, 2007; Ferris, 1999). Truscott, reflecting the views of teachers who adhere to process theories of writing, advanced the strong claim that correcting learners’ errors in a written composition may enable them to eliminate the errors in a subsequent draft but has no effect on grammatical accuracy in a new piece of writing (i.e., it does not result in acquisition). Ferris disputed this claim, arguing that it was not possible to dismiss correction in general as it depended on the quality of the correction—in other words, if the correction was clear and consistent it would work for acquisition. Truscott replied by claiming that Ferris failed to cite any evidence in support of her contention. To correct or not to correct written errors, then, remains contentious, although a number of recent studies (e.g., Sheen, 2007; Ellis, Sheen, Murakami, & Takashima, 2008) have produced evidence to show that written CF can result in acquisition. Reviewing literature relating to this controversy, Hyland and Hyland (2006) commented “it is difficult to draw any clear conclusions and generalizations from the literature as a result of varied populations, treatments and research designs” (p. 84), implying that contextual factors influence the extent to which CF is effective.

SLA researchers also disagree about the role CF plays in L2 acquisition. Krashen (1982) called error correction “a serious mistake” (p. 74). He offered two main reasons for this view. First, “error correction has the immediate effect of putting the student on the defensive” (p. 75) with the result that the learner seeks to eliminate mistakes by avoiding the use of complex constructions. Second, error correction only assists the development of “learned knowledge” and plays no role in “acquired knowledge.” However, Krashen felt that error correction directed at simple and portable rules, such as third person *-s*, was of value because it would enable learners to monitor their production when the conditions allowed (i.e., the learner was focused on form and had sufficient time to access learned knowledge). VanPatten (1992) promulgated a similar view to Krashen’s, arguing that “correcting errors in learner output has a negligible effect on the developing system of most language learners” (p. 24). However, other SLA researchers, especially those working within the interactionist framework, have viewed CF as facilitative of language acquisition. Their views are reflected in VanPatten’s later position on CF. In VanPatten (2003), for example, he acknowledged that CF in the form of

negotiating for meaning can help learners notice their errors and create form-meaning connections, thus aiding acquisition. There is increasing evidence that CF can assist learning (see, for example, Ellis, Loewen, & Erlam, 2006; Bitchener, Young, & Cameron, 2005), and current research has switched from addressing whether CF works to examining what kind works best (see below).

Choice of errors to correct

There are two separate issues here: (1) which specific errors should be corrected and (2) whether CF should be unfocused (i.e., address all or most of the errors learners commit) or focused (i.e., address just one or two error types).

Various proposals have been advanced regarding which errors to correct. Corder (1967) distinguished “errors” and “mistakes.” An error takes place as a result of lack of knowledge (i.e., it represents a gap in competence). A mistake is a performance phenomenon, reflecting processing failures that arise as a result of competing plans, memory limitations, and lack of automaticity. Burt (1975) suggested that teachers should focus on “global” rather than “local errors.” Global errors are errors that affect overall sentence organization. Examples are wrong word order, missing or wrongly placed sentence connectors, and syntactic overgeneralizations. Local errors are errors that affect single elements in a sentence (for example, errors in morphology or grammatical functors). Krashen (1982), as noted above, argued that CF should be limited to features that are simple and portable (i.e., “rules of thumb”). Ferris (1999) similarly suggested that written CF be directed at “treatable errors” (i.e., errors relating to features that occur in “a patterned, rule-governed way” (p. 6). Others, including myself (Ellis 1993), have suggested that CF be directed at marked grammatical features or features that learners have shown they have problems with.

In fact, none of these proposals are easy to implement in practice. The distinction between an “error” and a “mistake” is nothing like as clear-cut as Corder made out. The gravity of an error is to a very considerable extent a matter of personal opinion. Vann, Meyer, and Lorenz (1984), for example, found that some teachers were inclined to view all errors as equally serious—“an error is an error.” There is no widely accepted theory of grammatical complexity to help teachers (or researchers) decide which rules are simple and portable or to determine which features are marked. Hard-pressed teachers often do not have the time to ascertain which features are problematic. Even if the careful selection of errors to target were possible in written correction, it would be well-nigh impossible in on-line oral correction.

Selection is more possible regarding the second issue relating to the choice of errors to correct. Methodologists generally advise teachers to focus attention on a few error types rather than try to address all the errors learners make (see, for example, Harmer, 1983, and Ur, 1996). Similarly, SLA researchers see merit in a focused approach. Indeed, such an approach is necessary in experimental studies of CF as researchers need to predetermine which errors to correct in order to design appropriate testing instruments. Interestingly, recent studies (Bitchener, Young, & Cameron, 2005; Sheen 2007; Ellis et al., 2008) have shown that when written CF is “focused” it is effective in promoting acquisition. These studies suggest that Truscott’s opinions about the inefficacy of written CF in general may be wrong. SLA studies of oral CF have increasingly investigated

focused as opposed to unfocused correction with plenty of evidence of its efficacy (e.g., Han, 2001; Lyster, 2004; Bitchener, Young, & Cameron, 2005).

Choice of corrector

Teachers are often advised to give students the opportunity to self-correct and, if that fails, to invite other students to perform the correction (e.g., Hedge, 2000). Such advice can be seen as part and parcel of the western educational ideology of learner-centeredness. Motivated by theories that place a premium on learner output as opposed to input, researchers have also examined whether self-correction is both possible and beneficial.

Some CF strategies automatically place the burden of correction on the learner—for example, signaling an error by means of a clarification request or by simply repeating the erroneous utterance. In the case of written CF, “indirect correction” (e.g., indicating the presence of an error without supplying the correct form or using an error-coding system to signal the general category of an error) constitutes a half-way house—the teacher takes on some responsibility for correcting but leaves it up to the individual student to make the actual correction. There is evidence to suggest that prodding the learner to self-correct is effective in promoting acquisition (e.g., Lyster, 2004; Ferris, 2006).

There are, however, a number of problems with learner self-correction. First, learners typically prefer the teacher do the correction for them. Second, and more importantly, learners can only self-correct if they possess the necessary linguistic knowledge. That is, in Corer’s terms, they can correct their “mistakes” but not their “errors.” Other (typically teacher) correction will be necessary to enable learners to identify forms that are not yet part of the interlanguage. Third, although output-prompting CF strategies signal that there is some kind of problem with the learner’s utterance, they do not make it clear that the problem is a linguistic one (as opposed to just a communicative one).

Thus, there are clear grounds (theoretical and practical) for encouraging self-correction, but this will not always be possible, as indeed methodologists such as Hedge acknowledge. This presents teachers with a conundrum—should they push the learner to self-correct or provide the correction directly themselves? One solution sometimes advocated to this problem is to conduct CF as a two-stage process: first encourage self-correction and then, if that fails, provide the correction. This was the approach adopted by Doughty and Varela (1998). They responded to learner errors by first repeating the learner utterance highlighting the error by means of emphatic stress and, then, if the learner failed to correct, reformulating the utterance, as in this example:

- (2) L: I think that the worm will go under the soil.
 T: I *think* that the worm *will* go under the soil?
 L: (no response)
 T: I *thought* that the worm *would* go under the soil.
 L: I *thought* that the worm *would* go under the soil.

It might be argued, however, that such an approach is time-consuming and that it would be simpler and perhaps less intrusive to simply provide an explicit correction (e.g., “You need past tense—thought”).

Choice of CF strategy

Methodologists and SLA researchers have identified a number of different ways in which errors can be corrected. These have derived from descriptive studies (e.g., Chaudron, 1977; Lyster & Ranta, 1997) of the strategies teachers have been observed to use and typically consist of a simple list of strategies together with examples. More recently, researchers have developed hierarchical taxonomies of strategies based on a theoretical view of how CF works for acquisition. In the case of written CF, the key distinction is between direct, indirect, and metalinguistic forms of correction (see Ellis, 2009). In the case of oral CF, two key distinctions figure: (1) explicit vs. implicit CF (e.g., Carrol & Swain, 1993; Aljaafreh & Lantolf, 1994) and (2) input-providing vs. output-prompting CF (Lyster, 2004; Ellis, 2006). These two distinctions can be combined into the taxonomy shown in Table 1. Examples of the specific CF strategies are provided in Table 2.

Such a system is somewhat crude, however, as it fails to acknowledge the variation that can occur in the performance of a single CF type. Recasts, for example, can take many different forms as Sheen (2006) and Loewen and Philp (2006) have shown. For example, a recast may occur by itself or in combination with another CF strategy; it may or may not include prosodic emphasis on the problematic form; it may be performed with rising intonation (i.e., as a confirmation check) or with falling intonation (i.e., as a statement); it may be partial (i.e., reformulate only the erroneous segment in the learner’s utterance) or complete (i.e., reformulate all of it); and it may involve correcting just one or more than one feature. Depending on the particular way the recast is realized, it may be implicit (as in the case of full recasts performed in isolation, as a confirmation check, and without any prosodic emphasis) or much more explicit (as in the case of partial recasts performed in conjunction with another CF strategy, such as repetition, and as a statement with prosodic emphasis).

Table 1. A taxonomy of CF strategies

	<i>Implicit</i>	<i>Explicit</i>
Input-providing	Recast	Explicit correction
Output-prompting	Repetition Clarification request	Metalinguistic explanation Elicitation Paralinguistic signal

Table 2. Corrective feedback strategies

<i>Corrective feedback strategy</i>	<i>Definition</i>	<i>Example</i>
1. Recast	The corrector incorporates the content words of the immediately preceding incorrect utterance and changes and corrects the utterance in some way (e.g., phonological, syntactic, morphological or lexical).	L: I went there two times. T: You've been. You've been there twice as a group?
2. Repetition	The corrector repeats the learner utterance highlighting the error by means of emphatic stress.	L: I will showed you. T: I will SHOWED you. L: I'll show you.
3. Clarification request	The corrector indicates that he/she has not understood what the learner said.	L: What do you spend with your wife? T: What?
4. Explicit correction	The corrector indicates an error has been committed, identifies the error and provides the correction.	L: On May. T: Not on May, In May. We say, "It will start in May."
5. Elicitation	The corrector repeats part of the learner utterance but not the erroneous part and uses rising intonation to signal the learner should complete it.	L: I'll come if it will not rain. T: I'll come if it?
6. Paralinguistic signal	The corrector uses a gesture or facial expression to indicate that the learner has made an error.	L: Yesterday I go cinema. T: (gestures with right forefinger over left shoulder to indicate past)

The teacher has to select both the particular strategy to use in response to a learner error and the specific linguistic devices for realizing that strategy. This calls for considerable pragmatic and pragmalinguistic competence, and it is likely that teachers

respond intuitively to particular errors committed by individual students rather than knowingly in accordance with some predetermined error-correction policy. This may explain two general characteristics of teachers' error correction practices—they are imprecise and inconsistent. Imprecision is evident in the fact that teachers use the same overt behavior (e.g., “repetition”) both to indicate that an error has been made and to reinforce a correct response (Lyster, 1998). Nystrom (1983) commented that “teachers typically are unable to sort through the feedback options available to them and arrive at an appropriate response.” Inconsistency arises when teachers respond variably to the same error made by different students in the same class, correcting some students and ignoring others. Such inconsistency is not necessarily detrimental, however, for, as Allwright (1975) has pointed out, it may reflect teachers' attempts to cater for individual differences among the students.

Teacher educators have been understandably reluctant to prescribe or proscribe the strategies that teachers should use. In part this is because they are uncertain as to which strategies are the effective ones. But it also almost certainly reflects their recognition that the process of correcting errors is a complex one involving a number of competing factors. The approach adopted by Ur (1996), for example, is to raise a number of questions for teachers' to consider and then to offer answers based on her own practical teaching experience.

On the other hand, SLA researchers, armed with theory, have not been slow to advocate one or another CF strategy. Long (2006) has made the case for using recasts. This is based on the argument that recasts provide learners with the correct target forms, that they do so in a context that establishes form-meaning connections, and that they are non-intrusive (i.e., do not interfere with the flow of communication which Long sees as important for acquisition). Other researchers, however, have been less enthusiastic about recasts. Seedhouse (1997, 2004), reviewing data from a number of descriptive studies, reported that in general teachers were reluctant to utilize unmitigated, direct repair strategies, preferring instead indirect ones such as recasts (a finding echoed in a number of other studies). He suggested that this reflected the pedagogical advice that teachers receive (i.e., use indirect strategies to avoid embarrassing students) [2] and argued that, in fact, given the interactional organization of the L2 classroom and the expectations that result from this, the opposite is true—direct, unmitigated repair by the teacher marks errors as unimportant and unembarassing and thus should be the preferred strategy. Lyster (1998, 2004) also weighed in against recasts on the grounds that they were often ambiguous (i.e., learners had difficulty in determining when they were corrective and when they were not) and maintained that output-prompting strategies were preferable because they enabled learners to increase control over linguistic forms that they had partially acquired.

The disagreements regarding the relative efficacy of different CF strategies have motivated a number of experimental studies. Russell and Spada (2006) conducted a meta-analysis of studies that have investigated the effects of different CF strategies on acquisition. This analysis demonstrated that CF is effective in promoting acquisition (the mean effect size for the fifteen studies they included in their analysis was 1.16), but they were unable to reach any conclusion regarding the relative effectiveness of different strategies due to insufficient studies meeting the requirements of a meta-analysis. However, in a more traditional narrative survey of the research, Ellis, Loewen, and Erlam

(2006) concluded that (1) both types of CF, implicit and explicit, assist acquisition and (2) explicit CF is generally more effective than implicit. Their own study of the effects of recasts and metalinguistic explanation on the acquisition of past tense *-ed* supported (2); that is, metalinguistic explanation proved more effective. Other recent studies on oral CF (e.g., Lyster, 2004; Ammar & Spada, 2006) have shown that output-prompting strategies are more effective than recasts (an input-prompting strategy). These studies suggest that it might be possible to identify those oral CF strategies that are *generally* the most effective, but caveats will inevitably arise as to whether they will prove the most effective with all learners in all contexts. In the case of written CF there is as yet no clear evidence as to which of the three major types of strategies (direct, indirect, or metalinguistic) is the most effective.

The timing of CF

In written CF the correction is always delayed to allow for teachers to collect written work and respond. In the case of oral CF, however, teachers are faced with the choice of either correcting immediately following the learner's erroneous utterance or delaying the correction until later. This is an issue that teacher educators have addressed. Hedge (2000) noted that teacher guides accompanying course books frequently instruct teachers to leave correction until the end of fluency activities. She listed a number of techniques that can be used in delayed CF (e.g., recording an activity and then asking students to identify and correct their own errors or simply noting down errors as students perform an activity and going through these afterwards). There is general agreement that in accuracy-oriented activities correction should be provided immediately.

Some SLA researchers, however, present theoretical arguments for immediate correction even in fluency activities. Doughty (2001), for example, argued that for CF to induce change in a learner's interlanguage, it needs to take place in a "window of opportunity" and attract roving attention to form while the learner's focal attention remains on meaning. In this way, CF helps the learner to construct a form-meaning mapping, which is essential for true acquisition (as opposed to metalinguistic understanding) to occur. In contrast, Doughty claimed that delayed CF leads to focal attention on form resulting in explicit rather than implicit L2 knowledge. Doughty's position, then, is in direct opposition to that of many teacher educators.

It is not possible to arrive at any general conclusion regarding the relative efficacy of immediate and delayed CF. The claim that immediate CF inevitably disrupts fluency work is probably not justified, as Ellis, Basturkmen, and Loewen (2001) have shown. The teachers in this study engaged in frequent immediate CF (along with pre-emptive attention to form), but this did not appear to disrupt the overall communicative flow of the lessons. Thus, one of the main arguments for delaying correction would seem to be invalid. Also, there is no evidence to show that immediate correction is any more effective than delayed.

Corrective feedback—whether oral or written—is an integral part of teaching. It occurs frequently in most classrooms (but not in natural learning contexts—see Chun, Chenoweth, & Lupescu, 1982). It is addressed in all the popular handbooks for teachers. It has been the subject of a large number of empirical studies (Russell & Spada identified fifty-six studies). Yet it is not possible to form clear conclusions that can serve as the

basis for informed advice to teachers. It is pertinent to ask why. The answer lies in the complexity of CF as an instructional and interactive phenomenon and as a potential tool for acquisition. This complexity has implications for how CF is handled in teacher education programs.

SOCIOCULTURAL THEORY AND CORRECTIVE FEEDBACK

Much of the preceding discussion of CF has been based on an interactionist/cognitive view of L2 acquisition according to which CF facilitates acquisition by activating internal processes such as attention and rehearsal that make acquisition (conceived as something that goes on inside the learner's head) possible. In this section, a different view of acquisition and the role played by CF will be outlined.

Sociocultural theory (SCT) sees learning, including language learning, as dialogically based; that is, acquisition occurs *in* rather than *as a result of* interaction. From this perspective, then, L2 acquisition cannot be treated as a purely individual-based process (as it has been in cognitive and interactionist SLA) but rather as one shared between the individual and other persons. Dialogic interaction enables an expert (such as a teacher) to create a context in which novices can participate actively in their own learning and in which the expert can fine-tune the support that the novices are given (Anton, 1999). In particular, dialogic discourse demonstrates what a learner can and cannot do with assistance.

A key SCT construct for explaining corrective feedback is the zone of proximal development (ZPD). To understand the ZPD, three levels of development need to be distinguished. Vygotsky (1978) distinguished "the actual developmental level, that is, the level of development of the child's mental functions that has been established as a result of certain already completed developmental cycles" (p. 85) and a level of potential development as evidenced in problem solving undertaken with the assistance of an adult (an expert) or through collaboration with peers (novices). The third level, not commonly mentioned by sociocultural theorists, is the level that lies beyond the learner, that is, the learner is unable to perform the task even if assistance is provided. The ZPD lies at the second of these levels, the level of potential development. To borrow Vygotsky's own metaphor, it is the "bud" rather than the "fruit" of development. CF episodes can be viewed as an arena for studying how interaction mediates learning through the construction of ZPDs.

An often-cited example of how SCT can be applied to CF can be found in Aljaafreh and Lantolf (1994). They examined the one-on-one interactions arising between three L2 learners and a tutor who provided corrective feedback on essays they had written. Aljaafreh and Lantolf developed a "regulatory scale" to reflect the extent to which the help provided by the tutor was implicit or explicit. For example, asking learners to find and correct their own errors is considered an implicit strategy while providing examples of the correct pattern is highly explicit. An intermediate level occurs when the tutor indicates the nature of an error without identifying the actual error for the learner. In detailed analyses of selected protocols, Aljaafreh and Lantolf show how the degree of scaffolding provided by the tutor for a particular learner diminished (i.e., the help provided became more implicit over time). This was possible because the learners assumed increased control over the L2 and, therefore, needed less assistance. Clearly, however, a teacher needs considerable skill to determine the appropriate feedback needed.

In a follow-up study, using the same regulatory scale as in Aljaafreh and Lantolf (1994), Nassaji and Swain (2000) examined a tutor's oral feedback on the written compositions of two Korean learners of English. This study sought to compare the effectiveness of feedback on the two learners' acquisition of articles. The assistance to one learner was provided within her ZPD (i.e., the tutor systematically worked through Aljaafreh and Lantolf's scale to negotiate the feedback she supplied) while the assistance to the other learner was random (i.e., the tutor was supplied with a random list of correcting strategies drawn from the scale). The results showed that providing feedback within the learner's ZPD was effective in (1) helping the learner to arrive at the correct form during the feedback session, (2) enabling the learner to arrive at the correct form with much less explicit assistance in subsequent sessions, and (3) enabling the learner to use the correct form unassisted in a post-test consisting of a cloze version of the compositions she had written previously. In contrast, random feedback did not always succeed in enabling the learner to identify the correct article form in the feedback sessions and was much less effective in promoting unassisted use of the correct forms in the post-test.

The CF episode below illustrates the graduated approach to CF that these two studies found so effective. The learner fails to use the future form –'ll. The teacher responds first by attempting to draw the learner's attention to the error by means of a repetition, but another student interrupts by responding meaningfully to the first student's message. The teacher, however, continues to focus on form, using a more explicit CF strategy—an elicitation consisting of an either/or question. When this does not work she corrects directly ("I will pay") first using the full form of the modal verb and then the contracted form ("I'll"). The learner responds with uptake, first by echoing the teacher's "I'll" and then by incorporating it into a correct version of his original sentence. This episode lasted only a few seconds but within this brief period the teacher was able to fine-tune her feedback to the learner's ZPD. In terms of SCT, it illustrates learning in interaction.

- (3) S: oh my God, it is too expensive, I pay only 10 dollars
 T: I pay? //
 S2: okay let's go
 T: I pay or I'll pay? (.1.) // I will pay // I'll
 S: I'll // I'll pay only 10 dollars.

Another study, however, illustrates how CF can sometimes go wrong because teacher and learner fail to establish the intersubjectivity needed to build a ZPD. Hyland (2000) reported a study of CF in an academic writing program by analyzing the CF practices and learner responses of two teacher-student pairs. In one pair, the teacher rejected the student's use of her husband as a peer corrector, insisting that she attempt to self-correct. In the other, the teacher focused his correction on the student's vocabulary errors, advising him to use simpler vocabulary to avoid making numerous errors, while the students wished to continue to experiment with high-risk vocabulary as a learning strategy. Hyland highlights the mismatch between the teachers' and the students' goals. Whereas the teachers tended to treat the drafts as finished pieces that needed "fixing up," the students saw feedback as a means of enhancing their learning of English. Hyland felt that the teachers tried to control the feedback process too rigidly and failed to take account of the students' own goals.

GUIDELINES FOR CORRECTIVE FEEDBACK

Drawing broadly on both interactionist/cognitive and SCT views of CF, I would like to propose the following general guidelines for correcting learner errors. These guidelines constitute an explicit set of principles that teachers can reflect on when determining their own policy for CF.

1. Teachers should ascertain their students' attitudes towards CF, appraise them of the value of CF, and negotiate agreed goals for CF with them. The goals are likely to vary according to the social and situational context.
2. CF (both oral and written) works and so teachers should not be afraid to correct students' errors. This is true for both accuracy and fluency work, so CF has a place in both.
3. Focused CF is potentially more effective than unfocused CF, so teachers should identify specific linguistic targets for correction in different lessons. This will occur naturally in accuracy work based on a structure-of-the-day approach but can also be usefully applied in fluency work.
4. Teachers should ensure that learners know they are being corrected (i.e., they should not attempt to hide the corrective force of their CF moves from the learners). Whereas it will generally be clear to learners that they are being corrected in the case of written CF, it may not always be clear in the case of oral CF.
5. Teachers need to be able to implement a variety of oral and written CF strategies and to adapt the specific strategies they use to the particular learner they are correcting. One way of doing this is to start with a relatively implicit form of correction (e.g., simply indicating that there is an error) and, if the learner is unable to self-correct, to move to a more explicit form (e.g., a direct correction). This requires that teachers be responsive to the "feedback" they get from learners on their own corrective feedback.
6. Oral CF can be both immediate and delayed. Teachers need to experiment with the timing of the CF. Written CF is almost invariably delayed.
7. Teachers need to create space following the corrective move for learners to uptake the correction [3]. However, whether the correction is or is not appropriated should be left to the learner (i.e., the teacher should not require the learner to produce the correct form). In the case of written CF, learners need the opportunity to attend to the corrections and revise their writing.
8. Teachers should be prepared to vary who, when, and how they correct in accordance with the cognitive and affective needs of the individual learner. In effect this means they do not need to follow a consistent set of procedures for all students.
9. Teachers should be prepared to correct a specific error on several occasions to enable the learner to achieve full self-regulation.
10. Teachers should monitor the extent to which corrective feedback causes anxiety in learners and should adapt the strategies they use to ensure that anxiety facilitates rather than debilitates.

These guidelines should not be presented to teachers as mandatory but rather as a set of propositions that they can reflect on and debate. They serve as a basis for teacher development. Richards and Farrell (2005) define teacher development as follows:

Teacher development... seeks to facilitate growth of teachers' understanding of teaching and of themselves as teachers. It often involves examining different dimensions of a teacher's practice as a basis for reflective review.... (p. 4)

Corrective feedback constitutes an ideal "dimension" of "practice" in that all teachers will need to make decisions about whether, how, and when to correct their students' errors and also because the decisions they make depend on their overall theory of teaching and learning. Thus, reflecting on CF serves as a basis both for evaluating and perhaps changing existing CF practices and, more broadly, for developing teachers' understanding of teaching and of themselves.

Teacher development requires the teacher educator to adopt three roles: (1) to instigate and guide debate on CF (using the above the guidelines as a starting point), (2) to help teachers see how their ideas about CF reflect their overall teaching philosophy and thus to assist them to review this critically, and (3) to encourage teachers to identify specific strategies for conducting CF that accord with their revised philosophy.

One way in which this can be achieved is by initiating discussion of actual examples of CF. The activity below illustrates how this might be achieved. It presents teachers with a set of corrective feedback episodes and then invites them to discuss these in light of the guidelines presented above. In such an approach, the aim is to encourage critical reflection on the processes involved in CF and also to foster in teachers a preparedness to experiment by acting as researchers in their own classrooms (as advocated by Stenhouse, 1975).

Discuss the following corrective feedback episodes.

How effective are the CF strategies employed by the teacher?

To help you answer this question consider the following:

1. whether teacher and student appear to have shared goals in each episode
2. whether the students show awareness they are being corrected
3. whether the teacher is able to adapt the CF strategies she employs to the needs of the students
4. whether the students uptake the correction and whether the teacher allows space for this to happen
5. whether the students appear anxious or negatively disposed to the correction.

When you have answered these questions, state how you would have handled each error and give the rationale for the strategy you have chosen.

- (1) S: I have an ali[bi]
 T: you have what?
 S: an ali[bi]
 T: an alib-? (.2.) An alib[ay]
 S: ali [bay]
 T: okay, listen, listen, alibi

- (2) S: We <don't> catch, we can't
 T: we didn't
 S: didn't
 T: we didn't catch it, we didn't keep
 it, we threw it back, Ah very good,
 so you didn't eat it?
- (3) S: oh my God, it is too expensive, I pay only 10 dollars
 T: I pay? //
 S2: okay let's go
 T: I pay or I'll pay? (.1.) // I will pay // I'll
 S: I'll // I'll pay only 10 dollars.

CONCLUSION

CF is a complex phenomenon. This complexity is reflected in the controversies that surround such issues as whether to correct, what to correct, how to correct, and when to correct. Different perspectives on CF are afforded by interactionist/cognitive theories and sociocultural theory. Whereas the former seek to identify the CF strategies that are most effective in promoting the internal processes responsible for acquisition, the latter views CF as a form of social mediation that assists learners in performing language functions that they are incapable of performing independently. Both perspectives help to illuminate CF and the role it plays in L2 acquisition.

CF is clearly a topic of importance in teacher education programs, not least because of the growing evidence that it can play an important role in enhancing both oral and written linguistic accuracy. The key issue facing teacher educators is how to handle this complex issue. It is now clear that simplistic pedagogical proscriptions and prescriptions cannot reflect the reality of either the process by which CF is enacted or its acquisitional product. For this reason, this article has suggested that teacher education programs present teachers with a set of guidelines that can serve as a basis for reflection and teacher-led research into CF. Teachers need to be guided by research but also to establish to what extent its findings are applicable to their own classrooms. In other words, they should not accept pedagogic proposals without submitting them to their own empirical enquiry.

Teaching is a form of social mediation; CF constitutes one form of relatively well-researched social mediation. It offers teachers an opportunity to examine through reflection and through practitioner research a specific aspect of their own instructional practices and, in so doing, to contribute to our general understanding of how CF can be most effectively executed to promote language learning.

NOTES

1. Some of the material in this article will also appear in *Sociocognitive Aspects of Second Language Learning and Teaching*, to appear in R. Batstone (forthcoming).

2. Seedhouse offers no evidence for the claim that teachers prefer recasts because this is what they have been advised to use. My own examination of a number of popular teacher handbooks found no support for this claim.
3. Oliver (2000) has shown that the teachers she investigated often followed up a corrective feedback move with a discourse-continuing move, thereby depriving the learner of any opportunity to uptake the correction.

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