A list of guidelines for error correction in the writing process is presented, as well as a specific classroom application of a correction code and error analysis chart. Although developed for Southeast Asian English-as-a-Second-Language (ESL) students, the code could be modified and applied to any target population. The procedure for using the code provides students with practice gaining control over the language, within the context of their own writing, as the final stage of the writing process. The practice engages students in a problem-solving approach to error, and makes them responsible for their own learning. A brief review of the literature on composition theory is included. Contains 39 references. (LB)
The Role of Error Correction in the Process-Oriented ESL Composition Classroom

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How can editing for errors be made a part of the writing process without interfering with the larger, more important issues of writing to discover and communicate meaning? How should feedback on errors be given and what should students do with that feedback? Although no one procedure has been shown conclusively to be the most effective, research does point to the need for selectivity, systematicity, and consistency in error analysis and correction. A list of guidelines for error correction is presented, as well as a specific classroom application of a correction code and error analysis chart. Although developed for Southeast Asian students, the code could be modified and applied to any target population. The procedure for using the code provides students with practice gaining control over the language, within the context of their own writing, as the final stage in the writing process.

BRIEF REVIEW OF LITERATURE

Composition theory in recent years has focused on writing as a process of discovering and making meaning (Berthoff, 1981). Through the act of writing, ideas are discovered and explored. As the writer writes, ideas clarify and reformulate themselves as new ideas suggest themselves and are assimilated into the developing pattern of thought.

Research on the composing processes of unskilled writers has shown that the discovery of meaning is cut short by preoccupation with error (Shaughnessey, 1977; Perl, 1979). Basic writers begin editing their writing as soon as they begin to compose and consequently lose track of their ideas. They also have difficulty breaking away from whatever they have written on the page. They lack flexibility towards their writing and are unable to revise in chunks at the level of content. "The students are prematurely concerned with the 'look' of their writing... as soon as a few words are written on the paper, detection and correction of errors replaces writing and revising" (Perl, 1979). A composition class that focuses on correctness only reinforces habits that prevent students from developing meaning in their writing. Students will continue to perceive writing as "a 'cosmetic' process where concern for correct form supersedes development of ideas" (Perl, 1979).
The process orientation of most composition classes today has appropriately relegated surface-level error to the back burner. Techniques for freeing the basic writer from a debilitating preoccupation with error include freewriting; keeping a journal which is not graded or corrected; conferencing with peers; and writing multiple drafts of papers. With a heavy emphasis on the quantity of writing, it is assumed that accuracy-based problems will work themselves out as the writer develops confidence and fluency. "The obvious sophistication of so many of these students as speakers and the general understanding we have from linguists about language acquisition suggest that many of their syntactic problems will disappear simply with more writing" (Shaughnessey, 1977).

Can it be assumed, however, that writing in a second-language is the same as writing in a first language? Do second language factors affect the composing process? If so, how should we address those factors in the classroom? Zamel's study of the composing process of six advanced ESL students found that, in fact, advanced ESL writers do understand and experience writing as a process of discovering and creating meaning. Their writing, like that of experienced L1 writers, was consistently recursive and generative, and the changes they made were most often global. While all the writers attended to surface-level features and changes, "the skilled writers seemed to be much less concerned with these features at the outset and addressed them primarily at the end of the process. The least skilled writer, however, was distracted by local problems from the very beginning, changing words or phrases but rarely making changes that affected meaning" (Zamel, 1983).

In general, linguistic problems of composing in a second language did not seem to interfere with the students' writing process. The more skilled writers pursued the development of their ideas first, returning later to lexical and syntactic problems. There were particular language and editing skills that some individuals handled better than others, suggesting that "perhaps too much attention to meaning alone kept these students from carefully examining certain surface features of writing" (Zamel, 1983). With respect to error, Zamel states that it is important to find out why students are making certain errors before prescribing corrective measures. Instructors can then determine which errors are the result of carelessness and can be dealt with by closer proofreading and editing, and which are the result of incorrectly formed rules about the target language. In any case, "issues of content and meaning must be addressed first . . . language is of concern only when the ideas to be communicated have been delineated" (Zamel, 1983).

In contrast to Zamel's study, which found similarities between the composing processes of experienced L1 and L2 writers, Raimes (1985) points to interesting and important differences between unskilled ESL writers and basic L1 writers and cautions that these differences must be taken into consideration in the classroom. Unlike basic L1 writers, the ESL students in her study showed a commitment to getting their ideas down on paper, although they revised mostly at the sentence level; did not seem preoccupied with error and editing; and, in
fact, edited much less than expected. They frequently reread, but to clarify an idea as it emerged, not to correct for grammar. When they did edit, however, it was at the stage of working out an idea, not as a clean-up operation.

Raimes suggests that unskilled ESL writers are so used to error and to the teacher's correcting errors that they concentrate instead on finding the right words and sentences to express their meaning. "They know that they are language learners, that they use the language imperfectly... Since they expect errors and do not see them as stigmatizing in the way that L1 errors are, they are not preoccupied with them" (Raimes, 1985).

Although it is significant that ESL students at any level of proficiency can be engaged in the discovery of meaning, it is also important that attention may need to be given to surface features of writing. Some kind of middle ground is needed, where issues of both meaning and accuracy are addressed. "If in fact our students are focusing on meaning anyway, we should consider the need to attend to product as well as process. Our students should be taught not only heuristic devices to focus on meaning, but also heuristic devices to focus on rhetorical and linguistic features after the ideas have found some form... Attention to process is... necessary but not sufficient" (Raimes, 1985).

The question for ESL composition instructors, then, is how to incorporate editing strategies into the process of writing without interfering with the larger, more important issues of writing to discover and communicate meaning. The assumption, of course, is that ESL instructors are focusing on the process of writing, which unfortunately is not always the case. Cumming (1983) found that error identification and correction remains the most frequently employed technique of responding to ESL student writing. Despite the impact of process-centered studies on first-language composition, "ESL writing continues to be taught as if form preceded content, as if composing were a matter of adopting preconceived rhetorical frameworks, as if correct language usage took priority over the purposes for which language is used" (Zamel, 1983).

Students, too, before they are initiated into process-oriented writing, are very much concerned with the correctness of their writing and perceive good writing as correct writing, whether or not they actually edit for error. In a survey of attitudes toward writing, Samuels (1986) reported that 84% of ESL students consider getting the grammar correct to be the most important aspect of their writing in English, 52% getting the punctuation correct, and a meager 20% communicating their ideas. (Students could check more than one item in a question, so the percentages do not add up to 100%.)

Because the paradigm shift in ESL composition instruction from the product to the process of writing is still very recent and incomplete, it is especially important that editing skills be understood within the overall context of writing, as the final, clean-up stage in that process. We must be careful that students not become overly concerned with correctness. Samuels' survey (1986) also found that 85% of ESL writers in their first year of college thought about grammar, spelling, and punctuation as they were writing the words of a paper, and only
15% after they had finished writing the whole paper. This supports Raimes' finding that inexperienced L2 writers edit as they are working out an idea, not afterwards as a clean-up operation. Such a preoccupation with error can only interfere with, if not prevent, the writer’s ability to discover and make meaning.

We must also consider that if students become overly concerned with error, they may stop experimenting and taking risks in the target language. First- and second-language acquisition and error analysis studies have convincingly shown the importance of making errors in language learning as a necessary stage in the trial-and-error process through which proficiency and syntactic complexity are achieved (Corder, 1967; Corder, 1973; Allwright, 1975). Errors are evidence that the learner is testing hypotheses about the target language. They are a sign of growth.

A distinction needs to be made, however, between errors which are performance-based—that is, errors which are due to the physical or conceptual demands of writing as opposed to speaking, or errors which are accidental slips of the pen—and errors which are due to L1 transfer, or which represent the writer’s "interlanguage" (Bartholomae, 1980). Performance-based errors are easily detected by having students read their papers aloud. While reading the text, the writer will frequently miscue and complete or correct the text that he or she has written. In such cases the student’s errors are not a problem of linguistic competence, but one of performance, for which the writer simply needs more practice in using written conventions of the language and perceiving mistakes in his or her writing.

Errors which reflect incorrect hypotheses about the target language are usually systematic. By analyzing those errors and talking with students about them, it is possible to identify the cognitive strategies that learners are using to process information. Error analysis allows us to see errors as “windows into the mind” (Kroll and Schafer, 1978) and to plan instruction according to the needs of the individual language learner. “When students can make sense of their errors, coming to terms with them as the result of consistent and understandable strategies, they are more likely to try and change” (Kroll and Schafer, 1978).

Not all errors, however, are necessarily a sign of transition or growth; some may represent stagnation or fossilization. "A writer will stick with some intermediate system if he is convinced that the language he uses ‘works’, or if he is unable to see errors as errors and form alternate hypotheses in response” (Bartholomae, 1980). When students are not able to recognize their own errors, they need the assistance of someone more proficient in the language than they are, so they can modify their hypotheses about the target language.

Rather than assume that mastery of the forms will somehow take care of itself, we need to find ways of teaching form and use together. Eskey (1983) argues that the recent emphasis in second-language learning on communicative competence may actually encourage the fossilization of errors by providing students with “positive affective and cognitive feedback for language which is not correctly formed but still communicates enough of the message to make sense.
In other words, rewarding a learner’s fluency may, in some cases, actually impede his or her achievement of accuracy” (Eskey, 1983).

Assuming there is agreement that learner errors should be corrected, many questions still remain. It would obviously be counter-productive to correct all errors all the time. Henderson (1978), for example, suggests that in a speaking class, when the focus is on communicating meaning, attention to errors is inappropriate. Likewise, in a composition class, it would be inappropriate to attend to errors until after the process of discovering meaning is complete, after students have written several drafts of a paper, have conferenced in groups or with the instructor, and are satisfied with the content and organization of their papers. In addition, for practical reasons there is no point in having students edit for errors at the local level if revision at the global level is still needed; “... if the content of a student text is lacking in substance and meaning, if the order of the parts must be rearranged significantly in the next draft, if paragraphs must be restructured for logic and clarity, then many sentences are likely to be changed or deleted anyway” (Sommers, 1986).

With respect to which errors should be corrected, Henderson (1978) cites several competing theories: errors that interfere with the intelligibility of a message (Burt, 1975; Hanzeli, 1975); errors that stigmatize the learner from the perspective of native speakers (Richards, 1973; Corder, 1975; Hanzeli, 1975); errors that have become fossilized, which are no longer transitional (Richards, 1973; Valdner, 1975); and errors that occur at the greatest levels of frequency (Holly and King, 1971; George, 1972; Allwright, 1975). In addition, it is important to consider the proficiency level of the individual student, as intermediate and advanced students are more likely to benefit from and be more tolerant of error correction than students at the beginning level.

Although many teachers simply provide students with the correct form for written errors and require students to rewrite their papers incorporating the corrections, a discovery approach to error correction that requires students to make inferences and formulate concepts about the target language, simulates the language acquisition process and would thus help students fix this information in their long-term memories (Corder, 1967; Valdman, 1975). An error correction code, for example, provides students with the means to correct themselves (the code can be more or less detailed depending on the level of the students), but requires that the students take responsibility for making the actual corrections.

In addition, there should be ways of keeping track of what students are doing and of providing follow-up. Teachers need to concern themselves with progress over the long term, since significant improvement over the short term is not always a realistic expectation. Error charts which classify and chart students’ errors from one paper to the next are one way of doing this. (Hendrickson, 1978)
PEDAGOGICAL APPLICATION OF ERROR CORRECTION IN A PROCESS-ORIENTED ESL CLASSROOM

Although the literature on second language teaching contains suggestions for correcting written errors, there has only been a limited number of studies on the effect of error correction on second-language proficiency, and they either provide mixed results, or are of limited application to a process-oriented composition class for college-bound students (Robb, Ross, and Shortreed, 1986; Cardelle and Corno, 1981; Stiff, 1967; and Lalande, 1982). Nevertheless, the following implications can be drawn from the existing literature for dealing with error and form the basis of the pedagogical application which the rest of this paper will describe:

- students need to attend to error in order to facilitate accuracy as well as fluency in their writing;

- students need to attend \textit{first} and most importantly to the making of meaning and the communication of that meaning to an audience;

- editing should be viewed as the clean-up stage at the \textit{end} of the writing process;

- error correction must be accomplished in an atmosphere of support, where students do not feel stigmatized by or punished for making errors;

- students should be made aware of the complexity, yet systematicity of errors. Error analysis techniques, such as reading papers aloud and talking with students about their errors, are possible ways to accomplish this;

- students should be encouraged to experiment with language and be rewarded for taking risks; yet at the same time they should begin practicing \textit{control} over the structure of the language;

- error correction should be systematic and consistent;

- teachers should select types of errors to be targeted for each individual student, depending on the student's level of proficiency and tolerance for correction;

- students should make their own corrections, but be given enough feedback from the teacher to locate errors and know how to proceed; the degree of saliency necessary to accomplish this will depend on the students' level of proficiency;
students should keep track of their errors and monitor their own progress.

The Correction Code and Error Analysis Chart (see Appendix) were designed in response to the language errors of college-bound Southeast Asian students with MELAB (Michigan English Language Proficiency Test) scores between 65 and 75. The examples of errors have been taken from students' own papers, and are intended as models to help current students in the correction of their errors. The Code focuses on errors which appear most regularly in the writing of Southeast Asians and which are more easily teachable than others in the sense that they adhere to consistent rules of grammar (verb tenses, word forms, and sentence structure, as opposed to prepositions, articles, and punctuation).

Directions for the use of the Correction Code and Error Analysis Chart are as follows:

1) Once students are satisfied with the content and organization of their paper, the final draft is written. Three copies of the final draft are handed in, along with everything else students have written in connection with the paper (freewriting, rough drafts, peer reaction sheets, etc.)

2) The instructor responds to the content and organization of the paper on one copy of the final draft and grades accordingly.

3) The instructor targets certain types of errors for correction (based on level and needs of individual students) and, using the Correction Code, marks for these errors on the second copy of the final draft. The instructor indicates where the error is by circling it, and in the margin provides the appropriate reference from the Code.

4) When the students' papers are returned, they also receive the copy marked for corrections. They use the Correction Code to correct their errors, and then return the second copy of their paper to the instructor.

5) The instructor checks the corrections and returns that copy to the students. The students are asked to study their errors and corrections for the next class.

6) At the beginning of the next class, students are handed the third copy of their final draft and are asked to correct a second time for their errors, only this time their errors have not been marked or the references of the Correction Code provided for assistance.

7) Students keep a record of their errors by filling in an Error Analysis Chart for each paper and at the end, tallying their errors and choosing 3-
5 errors to focus on when editing the final draft of their next paper.

8) When students hand in the first set of corrections of their next paper, they are asked to hand in the Error Analysis Chart for the previous paper, so the instructor can make relevant comments about progress.

When students first receive their copy of the Code, they are asked to correct the errors in all of the examples. This process of correction engages them in a problem-solving approach to error and familiarizes them with the content and organization of the Code. The Code has not been designed to replace a grammar book, but rather to be used as a reference manual to aid in the quick identification and correction of specific, localized errors in a sentence. It does presuppose, however, that students have had some formal instruction in English grammar, or at least can work from the examples provided, accompanied by their corrections.

Formal instruction of grammar in the class is limited to error types which appear frequently in the students' writing. These errors are gathered from current students' papers and are grouped in like-categories such as verb forms, word forms, and parallelism, and provide the basis for classwork on language errors. As in the correction cycle, students practice editing for errors within the context of their own writing, while concentrating on a limited number of error types.

The most important aspect of the correction procedure is the second time students correct their errors, without any assistance from the teacher or the Correction Code. This reinforces what they have already done once, as well as responds to any perceptual problems students may have with regard to their errors. Laurence (1975) wrote of the necessity to combine perceptual and cognitive approaches to error:

[Remedial] students have problems with words: they do not focus on words in a structural way so there is little generalization about form and function; they have basic sound confusions because of second language/dialect interference or poor early training in phonics; they do not have strategies for approaching unfamiliar words which they must spell or read; they have limited visual word storage—some of the reasons why they have difficulty finding errors in their own essays ... A student's word perception, his ability to see, hear and structurally analyze words as they are, determines his ability to grasp a grammatical rule or to apply grammatical knowledge to his own writing.

The challenge of correcting errors a second time is to be able to find the errors, to see them as errors, and to know how to correct them. Whether students actually stop making certain errors altogether, they will at least have become consciously aware of them and be able to edit for them at the end of the writing process.

Furthermore, having students hand in three copies of their final draft facilitates a separation, both in the student's mind and in the instructor's, between writing-based issues and language-based issues. Students are graded on the basis of the content and organization of their papers --on the development and com-
munication of their ideas—and comments on the first copy of their final draft are limited to those concerns. Students are not graded for their corrections, but 10% of their final grade is based on satisfactory completion of the correction cycle on all papers—except the first paper (which is diagnostic) and the final paper (which is handed in the last day of class).

Finally, the Error Analysis Chart requires students to keep track of their errors and offers a strategy for focusing on a limited amount of material. Students are more likely to feel that progress can be made if expectations are reasonable and will, therefore, be more motivated and consistent in the effort they do make.

This procedure of having students correct their own errors, once in response to the instructor’s direction and a second time on their own, engages students in a problem-solving approach to error, and makes them responsible for their own learning; this procedure deals with error systematically and consistently, providing students with practice at gaining conscious control over the language, but without forgetting the complexity of the language and the need for taking risks to develop syntactically. Most importantly, by focusing on errors from the students’ own writing, a meaningful context for grammar instruction is provided without losing sight of the most important aspect of writing—to communicate meaning. And, by placing editing for error at the final stage in the writing process, students will not become preoccupied with error or inhibited in their discovery of meaning.

THE AUTHOR

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REFERENCES


APPENDIX
SAMPLE PAGE OF THE CORRECTION CODE

1. SUBJECT/VERB AGREEMENT  Ex:  • The food are excellent.
                                 • My father always speak Lao to us.

2. NOUNS/PRONOUNS

   a. Singular/Plural of nouns and pronouns  Ex:  • She glanced at me with a curious eyes.
                                                • They told me to go to different places to get informations. *(Note: count nouns can be pluralized, but not non-count nouns.)*
                                                • I put a, an, and the in sentences where it doesn't belong.

   b. Possessive form of nouns and pronouns  Ex:  • We spend a lot of time studying each other language.
                                                • I think a writing class is good to improve me reading and writing.

   c. Other forms of pronouns  Ex:  • Him and me are good friends.

   d. Double pronoun—do not substitute noun twice with a pronoun.  Ex:  • From that day on I always buy only things that I can afford them.

   e. Ambiguous reference—do not clear what the pronoun refers to.  Ex:  • I did not know where to go and was afraid to ask.
                                                • They are so tall.
**SAMPLE PAGE OF THE ERROR ANALYSIS CHART**

**Directions:** For each paper, add up the number of times you made each error. At the end, you will be asked to choose 3-5 errors to focus on when editing your next paper.

Theme # __________

<table>
<thead>
<tr>
<th>Error Types</th>
<th>Number of Occurrences</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Subject/Verb Agreement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Nouns/Pronouns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Singular/Plural</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Possessive forms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Other forms of pronouns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Double pronoun</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Ambiguous reference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Articles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Need definite article</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Need indefinite article</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. No article needed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Adjectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Ing/ed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Not pluralized/No possessive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Comparative/Superlative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Comparative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Superlative</td>
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</tr>
</tbody>
</table>

ERROR CORRECTION IN THE PROCESS ORIENTED CLASSROOM 101