Revisions by EFL College Writers in Japan: Text Quality and Revision Strategies[1]

Hiroe Kobayashi

Introduction

With an increased recognition of the importance of revision in the composing process, efforts have been made to present a model of revision. Donald Murray (1978), for example, asserts that "writing is rewriting" and characterizes the process of revision as being of two kinds: *internal*, to "discover and develop what they (writers) have to say," and *external*, to "communicate what they have found they have written to another audience"(1978:85). Murray further points out that while many experienced writers use internal revision as a critical part of their writing, most composition textbooks stress the superficial aspects of a text, paying little attention to the internal revision process.

Della-Piana (1978), also supporting the importance of revision, elaborates a model of revision for poetry-writing, in which poets move through such stages as preconception, discrimination, dissonance, tension and preconception. She explains that in this process, poets strive to achieve congruency between what they intend and what the poem itself suggests.

One of the most comprehensive models of revision for writing presented so far is that of Hayes et al.(1987), a model developed on the basis of their think-aloud protocol studies. In their cognitive-based model, revision also consists of several subprocesses by which writers eventually modify text and/or a plan for the text. First, in *task definition*, writers must define the task to be performed, for example, in terms of the goal and scope of revision; then in *evaluation*, they employ

the reading process to comprehend, to evaluate and to detect text problems at all possible levels. The outcome of this process is *problem presentation*, which subsequently leads writers to *strategy selection*. The strategies they apply to the solution of the detected problems include: 1)*ignoring* the problem, 2)*delaying* the effort to solve it, 3)*searching* for more information to clarify the problem, 4)*rewriting* the text (i.e., paraphrasing) and 5)*revising* it. For students to improve their revising skill, according to Hayes et al., they have to improve their ability to perform on each of these distinct subprocesses as well as to "increase what they know about texts, writing and revising"(1987:185).

While theories of revision are being developed, observations and empirical research have shed light on the amount and kinds of revision different groups of writers do. First, Stallard (1974) found that good student writers made more revisions than randomly selected writers. Similarly, Beach (1976) suggests that writers who revise more extensively are better writers because they can evaluate their essays more effectively. Bridwell's findings(1980), however, contradict Beach's; she found that the most extensive revisers received a full range of quality ratings from the top to the bottom of the scale. This finding implies that the amount of revision does not necessarily correlate with the quality of writing.

Many other studies show that college writers and experienced writers revise in different ways (Bridwell,1980; Faigley & Witte, 1981; Hayes & Hayes et al., 1987; Mohan, 1984; Murray,1978; Pianko, 1979; Perl, 1979; Sommers, 1980). Sommers(1980) reports that the college writers in her study attend to frequent revisions of local problems (i.e., lexical changes), due to their limited view of revision as an act of cleaning up mechanical and stylistic flaws. Perl(1979) also observes a similar tendency with the unskilled college writers in her study, pointing out that their editing occurs prematurely "before they have generated enough discourse to approximate the idea they have and it often results in their losing track of their idea"(1979:332). As opposed to these college writers, experts are commonly observed to attend to more global

problems; they set the task of revision in accordance with the text's purpose and goals (Hayes et al., 1987) or they revise to communicate ideas to their readers (Sommers, 1980). This global concern, as Hayes et al. observed, affects the writers' making strategic decisions when solving the problem encountered in their texts.

Like unskilled L1 college writers, low-level ESL writers are also found to revise the surface features of text, but instead of being preoccupied with the correction of errors, they rather concentrate on finding the right form to express their meaning (Raimes, 1985:245). Raimes explains that ESL writers whose linguistic ability is still being acquired are not much intimidated by errors. Skilled ESL writers, on the other hand, seem to share similarities with competent L1 college writers; they make more changes affecting meaning in the composing or revising processes (Zamel, 1983; Hall, 1990). Observations of these ESL writers' behaviors suggest that both similarities and differences exist in L1 and L2 revision.

As seen above, recent research on student writers' revision has been done mostly on first language writing, rather than on second/foreign language writing. In this light, the present study was undertaken to examine EFL student writers' revision. More specifically, the study aimed, first, to measure Japanese college students' ability to revise writing through comparison of two written drafts (one was the "original" and the other "revised"), and, second, to describe the strategies used in their revising processes. Finally, the study sought to explore the relation between improved quality of writing and the revision strategies employed.

METHODOLOGY
Subjects
Eighteen college students (7 males and 11 females) enrolled in the course of English composition I at Hiroshima University participated in the study. They were a mixture of sophomores(8), juniors(8) and seniors(2), majoring mostly in foreign language (English) or area

studies. These students were grouped into two on the basis of whether they had received any prior instruction on English writing; as a result, fifteen formed a group of inexperienced writers while the remaining three constituted that of more exerienced writers[2]. Their general English writing ability was assumed to be low-intermediate for the inexperienced and intermediate for the experienced writers. Because of the small number of students in the latter group, the study focused more on the resivions by the inexperienced writers, although comparisons were made between the two groups.

Data Collection

A total of thirty-six writing samples (18 pairs of "original" and "revised" drafts) were collected over one semester from April 1990 to September 1990. Eighteen samples were gathered from the first class, where instruction on English writing had not yet been given, and another eighteen from the final class, where students were asked to revise their original drafts. During the 13 week course period, the students had received instruction on English writing (e.g., organization) and also practiced revision of their own writing.

The topics the students were asked to write about involve a "comparison" rhetorical pattern; they are 1)Compare movies and videos, 2)Compare life in the city and life in the country, 3)Compare cars and bicycles (or motorcyles) and 4)Compare high school life and college life. The distribution of these topics is fairly even among the students except topic 1 (topic 1, 2; topic 2, 7; topic 3, 5; topic 4, 4). However, this distribution appears to bear no obvious basis to assume that the topic selection affected the students' writing performance.

Data Analysis

For rating the quality of written products, the scheme developed in an earlier study (Kobayashi & Rinnert, in press) was adopted. It based ratings on holistic judgements with a 5-point scale for 12 analytical subcomponents, which constitute the three major components: (1)

content:specifics, development, clarity, interest and thesis; (2)organiza-
tion:introduction, logical sequences of ideas, conclusion and unity; and
(3)style: naturalness, vocabulary and variety of form. Since the present
study added "naturalness" to style, a total of 12 subcomponents was
subjected to rating.(See the criteria for each subcomponent in Kobaya-
shi & Rinnert, 1992 and for "naturalness" in note 3).

Following the set criteria, the two raters (this researcher and a native
speaker of English) blind-coded all 36 compositions for scoring after
training with the 5-point scale. Using Pearson production-moment
correlation coefficients, interrater reliability for the two raters on all
the compositions were calculated as .87 for content, .86 for organization
and .92 for style, respectively.

For the analysis of revisions, the present study, like that of Hall's
(1990), followed the classification scheme developed in the research by
Sommers (1980), Bridwell(1980), and Monahan (1984). Although this
scheme usually consisted of four major categories based on stages,
level, type and purpose of revision, the researcher chose the latter three
as best suited to the study. Thus, the study excluded analysis for stage
because it involved only between-draft revisions for examination, but
not in-process revisions.

The first category applied to the classification of revisions, termed
level of revision, dealt with seven linguistic/discourse units: (a)word, (b)
phrase, (c)clause/sentence, (d)multi-sentence, (e)paragraph, (f)global,
and (g)surface. In this study, multi-sentence units were defined as
encompassing two or more consecutive sentences and global units as
involving more than one paragraph; thus, breaking up a paragraph into
two, for example, was identified as "global." Like this example, when
a movement from smaller to larger linguistic units (i.e., from a phrase
to a clause) occurred, or when its reverse movement (i.e., from a clause
to a phrase) took place, such change was usually identified as being at
the larger unit level in this study (See also Bridwell, 1980 for a complete
guideline for level of revision). Finally, changes at surface unit levels
included spelling, punctuation, capitalization, and contractions.

The second category, *type of revision*, classified the linguistic opera-
tions students performed in the process of revision into five subcatego-
ries: (a)addition, (b)deletion,(c)substitution (or alteration),(d)reordering,
and (e)consolidation. Although these five types of revision are illustrat-
ed in Table 1, substitution, in particular, needs some clarification. This
type usually occurs for one of two purposes, grammatical or infor-
mational (see purpose of revision below). When it takes place for an
informational purpose, however, there must be connected ideas between
the original unit and its replacement, as is often found in cases where
writers take the gist of the text and rephrase it. Without this connec-
tion, any revision would be identified as consisting of "deletion" and
"addition"; that is, "given ideas are deleted and new ideas added." The
revised version shown below illustrates two cases of revision catego-
rized as informational/substitution because the ideas in the two ver-
sions were related to each other; they are (1)clausal substitution, and (2)
multi-sentential substitution.

Original:

    It is in a movie house-dark, silent, and large, that (1)we can really
    enjoy a screen. (2)The most important thing is that the screen in a
    picture house is so big and the hall resound with the movie sound
    as if it envelope us. In the hall, we can enjoy it from the bottom of
    our heart without any other interruption.

Revised:

    In the movie house, which is large, silent and dark, (1)*we are taken
    into the world of picture. (2)We can see nothing but screen, and we
    can hear nothing but the sound of movie. In such a circumstance,
    we concentrate on seeing it before we know.*

The third category, *purpose of revision*, which was concerned with
why revisions were made, focused on three categories: (a)informational,
(b)grammatical, and (c)mechanical/cosmetic. "Informational" revisions

refer to any changes affecting writers' intention or meaning in the text; "grammatical" includes changes in form either for correct or for better wording, not involving serious meaning change (i.e., verb form, singular to plural, sentence structure). Mechanical and cosmetic changes are those occurring at a surface level, such as punctuation, capitalization and spelling change.

Following the scheme described above, all the revisions made in the students' second drafts were classified in terms of level, type and purpose of revision. Before actual classification, however, an inter-coder reliability test was performed between the two coders using two sets of originals and revised drafts; the result showed 83% for complete agreement on the 93 revisions made. Since this figure suggests reasonably high agreement, the researcher coded all the remaining drafts by herself.

Table 1
Selected Examples of the Five Revision Types

Type	Example
Addition	Of course trucks are in a hurry.→ Of course trucks are in a hurry *at night*,..
Deletion	*And* now, I'm boarding in *here* Hiroshima.→Now, I'm boarding in city, Hiroshima.
Substitution	In this way, I have a lot of reason I don't like the city very much→ In this way, I have *many* reasons why I don't *prefer* the city life very much
Reordering	I drive a car and ride on a motorcyle and a bicycle.→ I *ride on a bicycle and a motorcycle,and drive a car* as well.
Consolidation	It's when it rains, and terribly hot and cold. To my regret, motorcycles have not roof on it.→ *It's only when it rains, and terribly hot or cold, because motorcycles have no roof on it.*

Table 2

Means and Standard Deviations of Dependent Measures
(Content, Organization, and Style)

Group	Original			Revised		
	C	O	S	C	-O	S
Inexp.						
Mean	45.33	43.33	47.32	65.47	64.44	64.16
S.D.	10.52	10.38	8.18	11.40	12.14	9.64
Exp.						
Mean	66.00	70.00	62.57	81.33	81.67	76.67
S.D.	19.07	11.46	17.28	6.43	7.64	3.35

Inexp. = Inexperienced(n = 15)   Exp. = Experienced
Figures show converted raw scores in percentages

Table 3

Means and Standard Deviations for Total Words,
Revision Frequencies and the Rate of Revision
Per 100 Words of Text

Measures	Group	
	Inexp.	Exp.
Total Words		
1st draft	165.47(33.74)	249.00(60.90)**
2nd draft	229.00(48.92)	290.67(24.09)
Revisions	33.87(12.79)	49.67(7.64)*
Revisions/100 Words	14.92(5.70)	17.31(4.21)

Figures in parentheses show standard deviations.
*p < .05   **p < .01 (paired t-test)

Findings
Quality of the Text

To perform a statistical analysis of differences in the quality of students' written texts, a 2(inexperienced vs. experienced) x 2(original vs. revised) x 3 (content, organization and style) factorial design with repeated measures on two factors was used. The results revealed significant main effects for the two factors of experience [$F(1,16)=$ 11.93 $p<.01$] and revision [$F(1,16)=30.42$ $p<.01$], but not for the factor of component. There were no significant effects for interaction between any pairs of these three factors.

These findings indicate that the two factors of revision and writing experience affect the quality of students' written texts. As a whole, second drafts were rated significantly higher than first drafts, with considerably increased scores for each of the three subcomponents (total percent mean scores: 47.49 for first draft and 67.22 for second drafts; see Table 2 for means and standard deviations for dependent measures). In relation to differences between the two groups, more experienced writers outscored less experienced writers in the two drafts combined (total percent mean scores: 71.92 and 55.00, respectively); however, the latter group made more improvement on their second drafts than the former, particularly for content and organization by gaining an average 20% increase. Thus, although large differences were found between the two groups in the overall quality of written texts, such differences tended to narrow in the second drafts (45.33 and 63.97 for first drafts; 64.69 and 79.89 for second drafts).

Patterns of Revision

As shown in Table 3, both groups increased the total number of words in the revised drafts (mean increase in number of words: 64.47 for the inexperienced and 40.43 for the experienced). Along with this increase, they made 33.87 and 49.67 revisions, respectively, on average in the second drafts ($t=2.04$, $p<.05$). However, a significant difference was not found in the mean average of revisions per 100 words (14.92 and

17.31, respectively, $t = 0.68$, NS). Similarly, they demonstrated nearly the same pattern in the way they revised texts. The level of revision indicates that most of the revisions student writers made consisted of both sub-sentence units (i.e., word, phrase and clause) and sentence units (72% and 88.2% for the inexperienced and the experienced group, respectively). Yet, one noteworthy difference is that writers with less experience made more revisions at the discourse level (multi-sentence, paragraph and global) than those with experience (16.4% and 6.0%, respectively). In fact, it was at this level that the inexperienced writers outperformed the latter group in using all the five types of revision, whereas more experienced writers did the reverse at almost all the other levels (See Table 5). In spite of this difference, however, the two groups showed very similar tendencies in the way they used types of

Table 4
Percentage of Total Number of Revisions

	Inexp.	Exp.
Level		
Word	31.4%	35.6%
Phrase	17.3%	26.8%
Clause/Sentence	23.3%	26.8%
Discourse*	16.4%	6.0%
Surface	11.6%	4.7%
Type		
Addition	43.7%	45.6%
Deletion	17.3%	21.4%
Substitution	32.5%	27.5%
All Others	6.5%	5.4%
Purpose		
Informational	69.9%	81.2%
Grammatical	18.5%	14.1%
Mechanical/Cosmetic	11.6%	4.7%

*Discourse includes multi-sentence. paragraph and global units.

Table 5
Means and Standard Deviations for Rate of Revision
per 100 Words for Each Level by Type

	Inexp.		Exp.		
	Mean	S.D.	Mean	S.D.	
Word					
Addition	1.63	1.19	2.91	0.93	I < E*
Deletion	0.70	0.78	1.05	0.63	I < E
Substitution	2.46	2.19	2.27	2.14	I < E
All others	0.00	0.00	0.00	0.00	
Phrase					
Addition	1.59	1.02	2.09	0.95	I < E
Deletion	0.15	0.32	1.04	0.67	I < E
Substitution	0.83	0.64	1.41	0.82	I < E
All others	0.33	0.62	0.33	0.58	I = E
Clause/Sentence					
Addition	1.55	0.75	2.13	0.86	I < E
Deletion	0.91	0.63	1.51	0.75	I < E
Substitution	0.63	0.42	0.24	0.21	I > E
All others	0.80	1.26	1.67	0.58	I < E
Discourse					
Addition	0.80	0.70	0.22	0.38	I > E
Deletion	0.91	0.63	0.13	0.22	I > E
Substitution	0.63	0.42	0.49	0.59	I > E
All others	1.07	0.79	0.67	0.58	I > E

*Simple comparsion of the two groups based on mean average

revisions: addition most frequently (over 40%), then substitution (nearly 30%), deletion next (around 20%) and all the others least frequently (under 7%)(see Table 4). Finally, the revisions they made through these operations are primarily for an informational purpose, accounting for nearly 70% to 80% of all the changes. This finding clearly indicates that the student writers in the present study paid more attention to meaning changes than to grammatical and mechanical ones.

Correlation Between Quality and Revision Frequencies

The improved quality of the second drafts, which was reported earlier, is apparently due to the revisions made in the drafts. The result of Pearson product-moment correlation coefficients calculated ($r=-.12$), however, showed there was not a significant correlation between the improved quality rating scores and the number of revisions. In fact, some of the students' essays clearly illustrate this tendency. One draft revised by an inexperienced writer contained 37 revisions, but its rating score increased by only 6%, whereas another draft with 27 revisions made a great deal of improvement by gaining a 43% increase. The tendency toward more revisions with less improvement seemed stronger with more experienced writers: while they tended to make more revisions than inexperienced writers (though the difference is not statistically significant), their improved scores were smaller than those of the latter group, as reported earlier. All these findings seem to suggest that what affected the improvement of students' written text was not so much the number of revisions made, but rather how the text was reshaped through the revisions.

Discussion and Implications

As the above findings show, through revision, both inexperienced and experienced EFL college writers made a significant improvement on the quality of second drafts regarding content, organization and style . Although the present study, like Bridwell's (1980), did not find a positive correlation between improved quality and the number of revisions made, it is assumed that such improvement must be associated with how successfully the changes are made. Since the investigation of this relationship needs further analysis, the discussion here rather concentrates on differences in revision between the two groups of writers in this study.

Both inexperienced and experienced writers made a great number of meaning changes, most often through addition, and also through substitution or deletion. These revisions, which must have contributed to

the development of ideas (second drafts are longer), occurred at all the levels. Yet, while a majority of the revisions focused on sub-sentence levels (word, phrase and clause), there was one conspicuous difference between the two groups; that is, inexperienced writers made more revisions at a discourse level (multi-sentence, paragraph and global combined) than experienced writers. This finding seems to somewhat contradict observations that college students' revisions were usually limited to sub-sentence or sentence level corrections with no meaning changes (Beach,1976; Sommer, 1980) or that competent college writers attend to meaning changes more at a global level (Sommer, 1978).

The tendency for inexperienced writers to revise large portions of a text may be explained by their use of a rewriting strategy. Hayes et al. (1987) refer to this strategy as one "by which the writer abandons the surface structure of the text, attempts to extract the gist, and rewrite that gist in his or her own words"(p.187). According to them, this strategy can be adopted either when the reviser does not have adequate skill to fix the text problem (as is often found with inexperiened writers) or when the reviser sees the text as having too many problems to make revision worthwhile (as is often found with experts). The researcher speculated that these two cases might apply to the inexperienced writers in the present study. The writers, assumed to be a low-intermediate level, probably developed some ability to detect global problems in the text during the course; yet, some still did not know how to fix the problems because of their limited revising skill. Some others, on the other hand, developed enough ability to find many serious problems (i.e., organization or a plan for the text) and also learned how to attend to these problems. In such cases, they chose to rewrite a greater portion of the text rather than to revise it based on one-to-one correspondence from sentence to sentence. In fact, the draft with the most improved rating score contained significant meaning changes, in which the writer took up some ideas from the first draft and rewrote the whole text around these ideas by making them into subtopics. Thus, although the latter case is often found with experts

(Hayes et al., 1987), it can also occur with less experienced writers when their abilities to assess a text and to solve text problems improve.

By contrast, the experienced writers in the study did not seem to use a rewriting strategy as frequently. Perhaps they felt that the first draft was adequately written so that it did not need any major revision involving extended discourse. This may explain why most of their revisions focused on sub-sentence (word, phrase and clause) and sentence levels. Yet, in comparison between this group and Hall's advanced ESL writers (Hall, 1990), the revisions by the latter group concentrated on even smaller sub-sentence units such as word and phrase (the revisions made at these two levels add up to 85% for Hall's advanced ESL writers and to 62.4% for the intermediate writers in this study). This indicates that there may be a developmental stage for ESL/EFL writers' revising skill, perhaps like that of first language writers.

Finally, the questionnaire responses revealed the importance of instruction in developing students' revising skill. Regarding what the students relied on while revising a text, eight out of the 18 writers in the study answered that it was the knowledge they had gained about English writing in the class and eight writers responded that it was a sense of critical view developed through reading their own essays for revision and also reading others' for comments. This result suggests that if revising skill is a significant part of the composing process, it is important for instructors to provide students not only with knowledge about English essays but also with opportunities where they have to deal with a variety of text problems. Through this kind of practice, students can apparently develop ability to evaluate their writing effectively for revision.

In conclusion, the findings of the present study should be applied with caution. This study was based on a small size sample, particularly for the experienced group. For a more legitimate comparison, a larger sample should be used in future research.

Notes

1. I would like to thank Carol Rinnert for serving as a rater as well as for all other help in clarifying some of the issues related to this research.
2. The three students forming the experienced group were all juniors who had already taken English Composition II prior to I.
3. "Naturalness" is defined as "smooth flow of ideas through effective connection between/within sentences."

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