

ENGLISH HANDBOOKS: A SPECIAL READABILITY PROBLEM

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Introduction

Originally intended to provide student writers quick access to information on grammar, punctuation, and usage, writing handbooks are more widely used today to research the changes called for by comments — often simply symbols (7a, 20c, etc.) — which teachers write in the margins of their students' work. Moreover, handbooks are increasingly hawked by publishers as main texts, or even as the only books writing classes will need. Accordingly, many handbooks have added extensive sections on rhetorical principles and research techniques. Rather than reference information, these sections are designed to provide lessons for out-of-class reading and in-class discussion. However adequately they may do this relative to the many more specialized rhetoric or composition texts available, their nature has clearly changed: They have become books to be read rather than consulted. Because of this new role, readability — the ease with which the student can process writing into understanding — has become a significant factor in handbook evaluation.

While readability studies of college textbooks have given useful information to those involved in the text-

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selection process, a readability study of handbooks poses several problems. With handbooks, concern is not limited to a whole-book readability score; individual parts — texts, examples, and exercises — need separate consideration. It is not enough that a handbook provide accessible text. If examples and exercises do not match the complexity level of the text, then handbook value decreases; if examples or exercises are very simple, then handbook users must question the need for explanations which sound complicated.

Furthermore, though publishers assure us that overall readability of textbooks has improved in recent years, readability levels may still vary widely from one section of a book to another. For example, subject-verb agreement sections might be easy to read while sections on paragraphing might be very difficult to read. These possibilities lead to two research questions: 1) Do the three parts of handbooks (text, examples, and exercises) match in reading ease? 2) Is there significant variation in reading ease among sections of handbooks (e.g., grammar, punctuation, rhetoric, and research)?

Interest level poses a further problem. Flesch has postulated a human-interest category for textbooks.¹ Certainly an interest factor would indicate the power of a book to hold readers, even with a complicated text. In the past, handbook users have frequently found abstract explanations difficult to translate into the terms in which they see their own problems. For this reason, interest level helps decide the value of a handbook and leads to our third research question: 3) How do the human-interest criteria developed by Flesch apply to the specialized writing techniques used in handbooks?

To determine readability, the Flesch formula, a frequent choice for such studies, was used.² Although the Fry and Dale-Chall formulae have also proven their worth in determining reading levels,³ we felt that the additional interest dimension used by Flesch would provide useful information. And we felt that Flesch's difficulty measure would be more useful than a grade-level measure.

The Flesch formula determines reading ease (RE) by the formula $RE = 206.835 - .846 wl (word\ length) - 1.015 sl (sentence\ length)$. The result of this formula translates into the following reading-ease scale:

90-100 Very easy 60-70 Standard
 80- 90 Easy 50-60 Fairly difficult
 70- 80 Fairly easy 30-50 Difficult
 0-30 Very difficult

Flesch calculated the human-interest (HI) formula as $HI = 3.635 \text{ pw (personal words)} + .314 \text{ ps (personal sentences)}$. He placed the resulting sum on a human-interest scale as follows:

60-100 Dramatic 20-40 Interesting
 40- 60 Highly interesting 10-20 Mildly interesting
 0-10 Dull

METHOD

In this study, the Flesch formulae were applied to samples from five sections of eight commonly used English handbooks.⁴ Samples came from sections on grammar, punctuation, usage, paragraphing, and research. Each section was represented by three samples — one from text, one from examples, and one from exercises. The sole exception to this procedure was *The Little English Handbook*, which contains no exercises, and was represented by samples from text and examples only. Although not all available handbooks were examined, it seems fair to infer that what is true of this group is probably true generally of other books of the same genre.

RESULTS

Table 1 presents a comparison of the reading-ease and human-interest levels of the texts examined, with their rank in each area.

TABLE 1: Handbook Reading Ease (RE) and Human Interest (HI) Levels

	RE	RANK	HI	RANK
<i>Handbook for Writers</i>	59.7	7	33.1	4
<i>Harbrace College Handbook</i>	60.2	6	35.9	3
<i>The Harper Handbook</i>	63.7	3	29.2	5
<i>The Little, Brown Handbook</i>	60.3	5	26.1	6
<i>The Little English Handbook</i>	47.9	8	21.7	8
<i>New English Handbook</i>	64.4	1	42.9	1
<i>Prentice-Hall Handbook for Writers</i>	63.7	3	39.2	2
<i>Writing: A College Handbook</i>	64.0	2	24.7	7
Mean	60.5		31.6	
Median	62.0		31.2	
Standard Deviation	5.45		7.44	

At first glance the *New English Handbook* seemed both easiest to read and most interesting, with the *Prentice-Hall Handbook* running a closely balanced third and second place. *The Little English Handbook* seemed to be the hardest to read and to have the least interesting text. It also scored a standard deviation from the norm both in the direction of reading difficulty and in the direction of dullness. However, this initial ranking is deceptive.

When we look at the range of reading ease and interest within each of Flesch's levels, we find the considerable variation indicated in tables 2, 3, 4, and 5.

TABLE 2: Range of Reading Ease

	Very Easy	Easy	Fairly Easy	Standard	Fairly Difficult	Difficult	Very Difficult
<i>Handbook for Writers</i>	—	2	4	3	6	—	—
<i>Harbrace College Handbook</i>	1	3	3	1	7	—	—
<i>The Harper Handbook</i>	—	1	4	4	1	4	—
<i>The Little, Brown Handbook</i>	—	1	5	1	5	2	1
<i>The Little Eng- lish Handbook</i>	—	—	—	2	3	4	1
<i>New English Handbook</i>	1	1	3	4	2	3	1
<i>Prentice-Hall Handbook for Writers</i>	3	1	4	3	4	—	—
<i>Writing: A Col- lege Handbook</i>	—	1	1	9	4	—	—

Table 2 clearly shows that few handbooks maintained anything like consistency of reading ease. Only *Writing: A College Handbook*, with thirteen of fifteen samples at the Standard/Fairly Difficult levels; *Handbook for Writers*, with nine samples in the Fairly Difficult/Difficult levels; *The Little English Handbook*, with seven of ten samples at the same levels; and *The Harper Handbook*, with eight readings at the Fairly Easy/Standard level, seem to be relatively consistent in reading ease. All others require addition of samples stretched out over three levels to locate a majority of samples. The *New English Handbook*, which appeared best

in overall readability, stretches from Very Easy to Very Difficult in the samples taken. Further, the number of samples taken from this book at each level from Fairly Easy to Difficult is relatively even. Likewise, the *Prentice-Hall Handbook for Writers* has a significant number of samples ranging from Easy to Difficult. These results seem to call into question publisher claims of consistent readability levels.

Nor does the problem end here: The reading ease of example, exercise, and text does not match.

TABLE 3: Reading Ease Scores in Text, Exercise, and Example

	Text	Examples	Exercises
<i>Handbook for Writers</i>	41.0	69.7	60.7
<i>Harbrace College Handbook</i>	52.2	64.2	64.1
<i>The Harper Handbook</i>	58.9	64.4	67.7
<i>The Little, Brown Handbook</i>	54.7	64.0	62.6
<i>The Little English Handbook</i>	43.4	52.8	—
<i>New English Handbook</i>	53.8	76.7	62.6
<i>Prentice-Hall Handbook for Writers</i>	59.4	75.9	55.0
<i>Writing: A College Handbook</i>	64.9	62.2	66.5

The *Prentice-Hall Handbook for Writers* and the *Handbook for Writers* vary over three reading-ease levels. All others vary over two, except for *Writing: A College Handbook*, which is consistently on the Standard level. The samples as tabulated show an even greater discrepancy. *The New English Handbook's* examples cluster in the three easiest reading levels: its text is never easier than Standard. *The Prentice-Hall Handbook for Writers' examples* congregate in the Easy/Fairly Easy levels: the text ranges from Standard to Difficult. *The Little, Brown Handbook's* text is focused in the Fairly Difficult to Difficult levels: its examples generally range in the Easy to Standard levels; its exercises range from Fairly Easy to Fairly Difficult. In short, match-ups between the reading ease of text, exercise, and examples are rare.

The number of such triple matches is as follows:

<i>Handbook for Writers</i>	— 0
<i>The Harper Handbook</i>	— 0
<i>The Little, Brown Handbook</i>	— 1
<i>The Little English Handbook</i>	— 0
<i>New English Handbook</i>	— 0

<i>Prentice-Hall Handbook for Writers</i>	— 0
<i>Writing: A College Handbook</i>	— 1

The number of double matches — at least two among text, exercises, and examples — for the five subject areas chosen from each handbook is as follows:

<i>Handbook for Writers</i>	— 2
<i>Harbrace College Handbook</i>	— 3
<i>The Harper Handbook</i>	— 3
<i>The Little, Brown Handbook</i>	— 3
<i>The Little English Handbook</i>	— 1
<i>New English Handbook</i>	— 2
<i>Prentice Hall Handbook for Writers</i>	— 1
<i>Writing: A College Handbook</i>	— 5

Only *Writing: A College Handbook* stays close to maintaining the same reading-ease level throughout.

Human-interest data present similar problems. Table 4 shows the distribution of these data.

TABLE 4: Number of Samples by Interest Level

	Dramatic	Highly Interesting	Interesting	Mildly Interesting	Dull
<i>Handbook for Writers</i>	2	3	6	1	3
<i>Harbrace College Handbook</i>	2	3	7	—	3
<i>Harper Handbook</i>	—	4	6	2	3
<i>The Little English Handbook</i>	—	3	2	1	4
<i>The Little, Brown Handbook</i>	1	2	5	3	4
<i>New English Handbook</i>	4	4	5	1	1
<i>Prentice-Hall Handbook for Writers</i>	4	2	6	2	1
<i>Writing: A College Handbook</i>	—	3	5	5	2

A surprisingly large number of samples (79) fall into the three highest Human Interest categories. Even more surprising, 32.2% of the samples fall into the Dramatic or Highly Interesting groupings. These ratings reflect two of the serious problems in judging handbook interest: the impersonal-personal structure and the use of command and question sentences.

Almost universally, handbooks make use of impersonal-personal nouns and pronouns. It is common to find lists of personal pronouns, particularly in discussions of agreement, reference, and verb forms. These lists have no referent to any known "I," "you," "he," or "she." For example, in *Writing: A College Handbook*, we find, "Years ago, will was used only with you, they, he, she, it, and noun subjects, and shall was used with I and we. . . ." This brief passage contains five personal words. Flesch formula directions call for each of these words to be counted in determining interest level. Clearly, these personal words have no personal referents and are thus used impersonally in this context. Counting them produces an artificially high Human Interest level. Similarly, examples and exercises use pronouns (even "I" and "you") which have no relation to the text's writer or reader. Such names of convenience are also used to show a principle in action. Typical is this example from *The Harper Handbook*: "There are is in my family my mother, my father, my sister, and I." This sentence contains seven personal words. However, none of these words is really personal. The family exists for one sentence only. "I" is clearly neither reader nor writer. Nor does mother, father, or sister have a personal context. These are only words gathered in a sentence to illustrate a point. We could easily substitute, "There is are five dogs, three sheep, and an elephant," and the way a reader reacts to the sentence as example would not be altered. Thus again, we have personal words used impersonally and a higher interest score than is warranted.

The frequency of command and question sentences, both counted as personal by Flesch, also contributes to raising Human Interest scores far beyond realistic levels. Traditionally, handbooks have used the impersonal imperatives to make their points — for example, "Use a comma following an introductory participial phrase" or "Use no unnecessary commas." Nor is it simply section headings that use this structure. Certain sections abound in it. While these writers may be expressing a view on grammar principles, they are not speaking to the reader in the personally direct tone normally associated with the imperative.

These two problems should become evident if examination reveals that human-interest levels vary sharply according to sections which lend themselves to the

impersonal-personal construction and to the imperative mode. And this is the case. Table 5 shows the relative frequency of personal pronouns and personal sentences among sample categories.

TABLE 5: Breakdown of Personal Pronoun and Personal Sentence Distribution

	Text		Examples		Exercises	
	PW	PS	PW	PS	PW	PS
<i>Handbook for Writers</i>	2.4	(8.0)	11.6	(10.9)	9.4	(23.7)
<i>Harbrace College Handbook</i>	4.2	(17.7)	11.2	(4.9)	7.0	(2.9)
<i>Harper Handbook The Little, Brown Handbook</i>	0.8	(11.5)	9.0	(1.4)	9.0	(7.2)
<i>The Little English Handbook</i>	3.1	(9.0)	5.3	(0)	8.6	(6.0)
<i>The Little English Handbook</i>	4.6	(4.2)	6.2	(0)	—	—
<i>New English Handbook</i>	6.6	(39.1)	12.8	(12.2)	10.8	(13.9)
<i>Prentice-Hall Handbook for Writers</i>	8.4	(30.5)	10.0	(36.4)	8.0	(29.1)
<i>Writing: A College Handbook</i>	4.8	(7.7)	7.6	(3.0)	8.8	(10.4)

Six books have a higher percentage of personal sentences (most frequently imperatives) in text than in example; six have higher rates of personal sentences in text sections than in exercises. As "personal" sentences are fewer in exercise and example sections, personal words mount. Considering the numbers of sentences generated to demonstrate points, this is not surprising. Only the *Prentice-Hall Handbook for Writers* has an exercise score in personal words lower than its text score. Again, the personal-word count rises in situations in which impersonal-personal pronoun structures may be expected to predominate. Only the *Prentice-Hall Handbook for Writers* and *The Little English Handbook* seem relatively consistent in using personal words.

When all has been said, it seems logical to judge interest more by cluster of Human Interest scores than by how high these scores are, for a book using a high level of impersonal-personal structures will do so throughout the

book and thus create an artificially high level of interest. If we judge this way, we are led to conclude that there may be little to choose among the books. All have half or more of their Human Interest scores concentrated at two adjoining levels. Only the *Harbrace College Handbook* has almost a majority (7) at one level (Interesting). Only *The Little English Handbook* has as few as half of its samples in two contiguous areas. This book, as indicated earlier, is the only one in which Human Interest scores are a standard deviation below the norm. This is probably because *The Little English Handbook* does not use exercises, which tend to raise the Human Interest level through use of impersonal-personal pronouns and nouns.

DISCUSSION

This study calls into question the applicability of Flesch's Human Interest standards in judging English handbooks: The heavy use of impersonal-personal structures seems to negate their effectiveness. One wonders whether such structures pervade other college textbooks. If so, Flesch's standards may not apply to a good deal of material which needs readability and interest evaluation. Further study of this question is needed.

In addition, significant variation exists between the readability levels of handbook text and those of example and exercise. The former is significantly more difficult to read than are the latter. This suggests why handbooks are so difficult to use effectively. Students may find the text overly complex, or they may find the examples too simple to be meaningful. In many cases, both situations occur. This variation suggests one way in which publishers should consider revising their handbooks significantly. It also suggests the need to examine other types of texts (chemistry and mathematics, for example) which use an instruction-exercise format to see if this problem also exists in them. Finally, readability of handbooks and similar texts is best determined by evaluating for intra-section readability as well as whole-text readability.

While readability is only one element in text selection, it is important, and we should not ignore it if we want to provide the best learning match possible between student and book. Unfortunately, the widely used and generally reliable Flesch Readability and Human Interest formulae

cannot provide the fast, easy ratings they produce with more homogeneous material, and may indeed mislead the evaluator who does not look carefully at other characteristics of the books under examination. In other words, there is no substitute for sensitivity to tone and balance, for an ear and a nose. A good text is lucid, direct, unselfconscious; good examples and exercises are couched in the kind of language students use if they are writing well. These qualities may not themselves be susceptible to quantification, but they need not be ignored.

NOTES

¹ *How to Test Readability* (New York: Harper and Brothers, 1951).

² Recent readability studies on college textbooks using the Flesch formulae include the following: W. R. Neal, Jr., and Joan D. Berryman, "Readability of Introductory Speech-language Pathology Texts," *ASHA*, 24 (1982), 111-114; Kenneth Kavale, Alfred Hirshoren, and J. T. Hunt, "Reading Texts: Readable?" *The Reading Teacher*, 31 (1977), 147-150; James William Tankard, Jr. and Elaine F. Tankard, "Comparison of Readability of Basic Reporting Texts," *Journalism Quarterly*, 54 (1977), 794-797; Alfred Hirshoren, J. T. Hunt, and Kenneth Kavale, "Readability, Human Interest, and Completeness of 15 Special Education Survey Texts," *Journal of Special Education*, 10 (1976), 233-236.

³ Judith A. Longo, "The Fry Graph: Validation of the College Levels," *Journal of Reading*, 26 (1982), 229-234.

⁴ Facts of publication for these texts are as follows: H. Ramsey Fowler, *The Little, Brown Handbook* (Boston: Little, Brown, 1980); Harry Shaw, *The Harper Handbook*, Fifth Edition (Cambridge, Mass.: Harper and Row, 1981); Edward P.J. Corbett, *The Little English Handbook: Choices and Conventions*, Third Edition (New York: John Wiley and Sons, 1980); James A.W. Heffernan and John E. Lincoln, *Writing: A College Handbook* (New York: W.W. Norton, 1982); Hans P. Guth, *New English Handbook* (Belmont, Calif.: Wadsworth, 1982); John C. Hodges and Mary E. Whitten, *Harbrace College Handbook*, 9th ed. (New York: Harcourt Brace Jovanovich, 1982); Celia Millward, *Handbook for Writers: Grammar, Punctuation, Diction, Rhetoric, Research* (New York: Holt, Rinehart and Winston, 1980); Glenn C. Leggett, C. David Mead, and William Charvat, *Prentice-Hall Handbook for Writers*, 8th ed. (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1982).