# Resource Consultant Training Program Training Module No. 2

RCTP

Objective and Holistic Scoring of Writing

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# OBJECTIVE AND HOLISTIC SCORING OF WRITING

#### Jan Hasbrouck

# ASSESSMENT OF WRITING IN THE CLASSROOM

Students' specific skill deficiencies must first be determined before teachers set instructional objectives in written expression (Isaacson, 1985). Unfortunately, many tests of writing are time consuming to administer and score and difficult to interpret. Such tests can be of little or no use to teachers in setting goals and planning instruction. The procedures presented in this module can help teachers identify students' skill deficits and plan writing instruction.

However, not all the procedures included in this module are appropriate for assessing the writing of all students. Research conducted at the University of Oregon over the past three years indicates that any one of these measures may have limited application for particular grade and ability levels. Moderate to strong correlations have been found between these measures and teachers' holistic judgments of the same writing samples for specific grade and ability levels. The purpose of this module is to define and describe the methods for collecting and scoring writing samples using both holistic judgments and seven objective procedures—not to suggest their specific applications.

#### DIRECT ASSESSMENT OF WRITING

Teachers can use two different methods when assessing writing. *Indirect* methods involve objective scoring, usually requiring students to identify correct writing conventions, often in a multiple-choice format. *Direct* methods involve scoring actual samples of students' writing. Direct methods are seen by many teachers and researchers as the preferred method for use in instructional situations because they reflect real world writing practices and provide an

immediate way for teachers to determine students' actual writing skills (Cooper & Odell, 1977; Greenberg, Wiener, & Donovan, 1986).

#### ASSESSING COMMUNICATION PROPERTIES OF WRITING

When directly scoring students' writing samples, teachers must decide what aspects of writing they will assess. A valid assessment procedure should measure properties of writing that clearly are related to communication (Wallace et al., 1987). A number of researchers, including Isaacson (1985) and Stewart and Grobe (1979), have identified six aspects of writing related to communication: legibility, spelling, syntax, use of mechanics, vocabulary usage, and content.

The procedures discussed in this module involve directly scoring students' writing samples and assessing the communicative quality of the writing through (a) counting objective indices of writing quality and (b) utilizing holistic teacher judgments. General legibility, fluency, correct spelling, and correct sequencing of words within sentences were the factors correlated with teachers' holistic ratings of students' writing in pilot studies (Parker & Tindal, 1989a; 1989b). Again, each of these measures has limited use and appropriate application with specific groups of students only.

# WRITING SAMPLE COLLECTION PROCEDURES

To use these scoring methods teachers need to follow a standardized procedure for collecting writing samples. Allow 10 minutes, start to finish, to collect each writing sample from a group of students. Use a stop watch to keep track of the time. Students write for three minutes at which time they mark a star on their papers. Then, they are allowed to finish their stories within a reasonable amount of time. Only the writing *up to the star* is scored.

Give students a blank sheet of lined paper and a pencil. Have them put their names on their papers before starting. Then say to the students:

I want you to write a story. I will read the beginning of a story to you first. Then I want you to write a story about what happens next. You will have 30 seconds to plan what you will write. Use that time to decide what will happen in your story. You will have three minutes to write. At the end of three minutes, I will say "Time." Right then, I want you to mark a star on your paper after the last word you

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wrote. (Demonstrate on the board). Then you will have a few more minutes to finish your story. After you are finished, you may go back and add a title to your story if you wish. Start your story with your own words. You should not write the words that I read to you. You won't write a title for this story until you are finished. Are there any questions? For the next 30 seconds I want you to think about a story that begins with: (EXAMPLE) "I went up to the old, deserted house. The door was open so I walked in. Suddenly..."

Start your watch. After 30 seconds of thinking time say, "Start writing." During the time students are writing, no questions can be answered regarding spelling or story ideas. If necessary, the story starter may be repeated to the students. Encourage students to write for the entire 3 minutes.

Restart your watch. Three minutes after the students started writing say, "Time. Make a star on your paper after the last word you wrote. You may now take a few more minutes to finish your story and write a title, if you wish."

When collecting samples to score, use story starters that are appropriate for the ages and interests of the students being tested. Avoid story starters that may generate lists (e. g., "If I had a million dollars I would buy...").

#### PROCEDURES FOR SCORING WRITING

Score each sample from *after* the title up to the star on the student's paper. The following procedures should be used in the order presented. The number of illegible words should be counted because the scorer must judge each word outside of its context, and that judgment is more accurate if the sample has not yet been read. If samples later will be scored holistically, photocopies should be made of each sample prior to scoring or the samples should be covered with acetate and scored with a soluble pen. This will allow holistic judgments to be made on clean, unmarked samples.

#### **Objective Scoring Procedures**

### 1. Percent of Legible Words

In order for writing to communicate, it first must be "readable" or legible. In order to determine legibility in an objective manner, teachers must first count the number of *illegible* words. An *illegible* word is defined as a group of letters

that cannot be recognized as a single, particular word OUTSIDE OF THE CONTEXT OF THE PHRASE OR SENTENCE. All other words are considered legible. Illegible words may or may not be correctly spelled. They may or may not contain perfectly formed letters. Numerals are not considered as words. Known slang words can be considered legible if they are decipherable. Words clearly written but unidentifiable as a single, particular word will be counted as "illegible" for the purposes of this scoring procedure.

To count the number of illegible words, judge one word at a time, separately from all the others. You must be able to *clearly* identify the word at *first glance*. If not, mark it as illegible with a wavy line beneath the word. (The marks used in these objective scoring procedures allow students to later edit and correct their work).

Scorers may mask the surrounding words by using a card with a cut-out slot or by blocking out adjacent words with their fingers. With either method be certain to examine one word at a time. SCORERS MUST BEGIN WITH THE LAST WORD WRITTEN BEFORE THE STAR AND PROCEED ONE WORD AT A TIME UNTIL THE FIRST WORD OF THE STORY IS REACHED.

Find the number of *legible* words by subtracting the number of illegible words from the total number of words (see Scoring Procedure 2). Then divide the number of legible words by the total number of words to calculate the percent of legible words. Figure 1 shows how to mark and count illegible words.

Figure 1: Example of marking and counting illegible words

	8 William of markets and counting megible words
Line 1	I Seen Agreat huge monster and it was 1
2	green and it started to attack me and then o
3	I seen some thing that I could Pick UP toggs 2
4	the monster a way so bent down and
5	I got it but I A tried it but it soemed to 1

#### 2. Total Number of Words Written

(for use in calculating other scores only)

A word is defined as a group of letters that have at least a reasonable resemblance to real words and are separated on the line by spaces. In writing samples where students have not left spaces between words, use your best judgment to determine which groups of letters the student intended to be words. This count includes legible and illegible words and words spelled correctly and incorrectly. The words do NOT have to be identifiable as particular, real words. The only acceptable one-letter words are "a" and "I," except for single letter abbreviations. Common abbreviations such as Dr., Ms., Ave., etc., are counted as one word. Numerals are not counted as words. Compound words written incorrectly as two clearly separate words are counted as one word. If two words are incorrectly written as one, single word, count it as one word. Capitalization and punctuation errors are ignored.

Use this score only to calculate a student's percent of legible words and percent of correctly spelled words. It should not be used as a writing score itself. Figure 2 illustrates how to count the total number of words.

Figure 2: Example of counting the total number of words

Line		# words
1	I seen 5 great huge monsters and thay were green and	10
2	thay started to attak me and then I seen some thing	20
3	that I cood pickup to get the monsters a way so bent	31
4	down and I got it but I * tried it but it seemed	38

Total number of words: 38

Line 1: "5" is a numeral and is not counted as a word.

Line 2: "some thing" is a compound word incorrectly written as two separate words, and is counted as one word

Line 3: "pickup" is two words written incorrectly as one word, so it counts as one word; "a way" is written incorrectly and counts as one word.

Line 4: word count stops at the star.

#### 3. Number of Correctly Spelled Words

(for use in calculating the percent of correctly spelled words)

Correct spelling plays an important role in communicating information to readers. To measure correct spelling, circle all the words that are spelled correctly given the context of the sentence. Numerals are not counted as either correctly or incorrectly spelled words. Known slang words can be considered correctly spelled if the student used a reasonably close phonetic spelling. Words written in the incorrect tense or form for the context of the sentence are considered misspelled. Ignore capitalization and punctuation errors and those minor grammatical errors where me/I, a/an, or us/them are misused (for example, "He gave the letter to I." or "She ate a apple.") A compound word incorrectly written as two separate words is treated as *one*, incorrectly spelled word, even if both parts are spelled correctly. Two words written incorrectly as one single word also are treated as *one*, incorrectly spelled word.

#### 4. Percent of Correctly Spelled Words

Calculate the percent of correctly spelled words by dividing the number of correctly spelled words by the total number of words. Figure 3 illustrates how to calculate the percent of correctly spelled words.

# 5. Number of Correct and Incorrect Word Sequences

After legibility and correct spelling have been assessed, the next aspects of writing to consider are (a) the accuracy of the words in conveying meaning and (b) the accuracy of the grammatical structures used. This is measured objectively by counting the correct and incorrect sequences of words.

A correct word sequence is defined as the sequence of two adjacent correctly spelled words which is acceptable within the context of the larger phrase or sentence to a native speaker of the English language. The term "acceptable" means that the scorer judges the word sequence as syntactically and semantically correct and appropriate (Videen, Deno, & Marston, 1982). A caret mark (^) is used to indicate each correct word sequence. A caret is placed above and between each correct sequence. A syntactically and semantically correct sequence must connect two, circled, correctly spelled words.

Figure 3: Example of calculating the percent of correctly spelled words

Line 1	Oseen 5 Great huge monsters and thay were Green and	# correctly spelled words 8
2	thay started to attak me and then () seen some thing	14
3	that Ocood pickup to get the monsters a way so bent	22
4	down and lightly but 1 * tried it but it seemed	29

Number of correctly spelled words: 29 Percent of correctly spelled words: 29/38 = 76%

Line 1: "seen" is an incorrect grammatical form; "5" is a numeral; neither of the two is counted as a correctly spelled word.

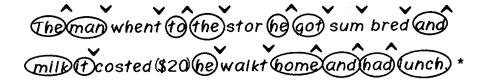
Line 2: "some thing" is a compound word incorrectly written as two separate words.

Line 3: "pickup" is two words written incorrectly as one word; "a way" is written incorrectly.

Line 4: "tried" is written after the star so it is not counted.

An inverted caret should be placed between each *incorrect* sequence of words spelled either correctly or incorrectly. Each pair of words then will have a caret marking a correct or an incorrect sequence, except at the end of sentences. Sequences end at the end of sentences (either marked by ending punctuation or determined by the scorer to be the end of the sentence). Figure 4 illustrates the process of marking correct word sequences.

Figure 4: The process of marking correct word sequences

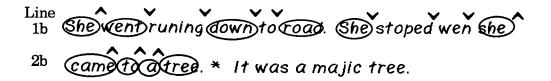


Word sequences stop at the end of sentences or before an incorrect conjunction (see directions for run-on sentences). Count the next word after the star, marking it as a correct or an incorrect word sequence, unless the star comes at the end of a sentence. The star marks the end of the scorable portion of the

writing sample. Figure 5 illustrates how to mark correct and incorrect word sequences.

Figure 5: Example of marking correct and incorrect word sequences





Line 1a: sequences end after "door" because that is the end of a sentence; one correct sequence is marked over the star because: (a) the words before and after the star are both correctly spelled and (b) it is a correct sequence but not the end of a sentence.

Line 1b: sequences end after "road" because that is the end of a sentence; there is one correct sequence marked after "she" because: (a) the word on the next line is correctly spelled and (b) it is a correct sequence. Line 2b: sequences end after "tree" because that is the end of a sentence.

Poor writers frequently write run-on sentences, using conjunctions such as and, but, so, or then incorrectly. If a conjunction is used improperly to link three or more clauses, the scorer must determine which pair of clauses fit best together, if any. The incorrectly used conjunction should be considered an error, even if it is correctly spelled. It may be crossed out to make scoring easier. The "extraneous conjunction" should be considered the end of the sentence. A CAREFUL, SECOND READING OF THE PASSAGE IS NECESSARY TO DETERMINE RUN-ON SENTENCE ERRORS.

# 6. Percent of Correct and Incorrect Word Sequences

Add the number of correct and incorrect word sequences. Then divide that total into (a) the number of Correct Word Sequences and (b) the number of

Incorrect Word Sequences to determine the percent of each. Figure 6 shows how to calculate the number and percent of correct and incorrect word sequences.

Figure 6: Example of calculating correct and incorrect word sequences

Line	# correct /# incorrect word sequences
1 (seen (5) Great huge monsters and that were green and	4/4
2 thay started to attak me and then Useen some thing	4/6
3 that Ocood pickup to get the monsters a way so bent	
4 down and Got it by the tried it but it seemed	5/0
Number of correct word sequ	uences: 18
Number of incorrect word sequences: 18	uences: 16 8/34 = 53%
= stock of correct word sequences. 10	// UT - UU/U

Percent of incorrect word sequences: 16/34 = 47%

Line 1: "5" is ignored and an incorrect sequence is marked between "seen" and "great"; "and" was determined to be an extraneous conjuction so sequences end there.

Line 2: "some thing" is treated as one incorrectly spelled word.

Line 3: "pickup" is treated as one incorrectly spelled word, as is "a way".

Line 4: "but" is an extraneous conjunction so sequences end there; there is one correct sequence marked over the star.

### 7. Capitalization and Ending Punctuation

Correct use of writing mechanics also plays a part in good writing. For these procedures, the correct use of capitals at the beginnings of sentences and the correct use of punctuation marks at the end of sentences are measured.

If the first word of any sentence is correctly capitalized, a "C" is placed above that first letter. If the last word of any sentence is followed by a period (or other appropriate end-punctuation mark), a "P" is placed above the correct punctuation mark.

#### 8. Percent of Correct Capitalization and Ending Punctuation

Calculate the percent of correctly capitalized beginning words and the percent of correctly punctuated sentences by first counting the number of sentences to determine the number of opportunities for each of these marks. Mark each capitalization and punctuation error with a check mark and a "C" or a "P." Then divide the number of "C" and the number of "P" words by the total number of sentences to find the percent of correct capitalization and ending punctuation. Figure 7 illustrates how to score capitalization and punctuation.

Figure 7: Example of marking and scoring punctuation and capitalization errors

C  $\mathbf{P}$  C She went runing down to road. She stoped wen she came to a tree it was a majic tree and the tree  $\mathbf{P}$  was vary vary tall! then she \* climbd it

Number of correct capitalizations: 2 Number of correct ending puncutuations: 2 Percent correct capitalizations: 2/4 = 50% Percent of correct ending punctuations: 2/3 = 67%

### 9. Mean Length of Correct Word Sequences

A widely accepted goal for written expression is for students to use expanded sentences to increase syntactic maturity (Isaacson, 1985). Better writers tend to use longer, more complex sentences. The average length of correct word sequences can be used as a measure of syntactic maturity. To score this aspect of writing, look over the writing passage and put parentheses around all adjacent carets, marking the correct word sequences. Count how many carets marking unbroken sequences are within each set of parentheses and add those numbers together. Single correct caret marks immediately preceded and followed by incorrect sequences are counted as a correct sequence of one. Divide the sum by the total number of sets to find the "mean length of correct word sequences." Figure 8 illustrates how to score mean length of correct word sequences.

Length of correct

Figure 8: Example of scoring mean length of correct word sequences

	word sequences
(Dseen (5) great huge monsters and thay were green and	
thay started to attak me and then I seen some thing	1, 3
that I cood pickup to get the monsters a way so bent	1,3
down and (got) it (x) (1 *) (tried) it but it seemed	5, 1

Total number of correct word sequences: 3+1+1+3+1+3+5+1=18Number of unbroken correct sequences: 8 Mean length of correct word sequences: 18/8 = 2.25

#### **Holistic Scoring Procedures**

Holistic scoring relies on impressions, not on rigorous line-by-line scrutiny. Teachers make a single, global judgment about the quality of a paper. They do not focus on single aspects of a paper such as organization, mechanics, or ideas, even though these traits undoubtedly influence a rater's judgment (Spandel, 1981; Rafoth and Rubin, 1984). Holistic scoring primarily was developed to rank students according to overall writing proficiency. A paper with a higher score is better than a paper with a lower score. Holistic scoring involves the use of model papers to guide teachers' scoring decisions along certain criteria. These model papers are called "range finders."

To use the holistic scoring procedure, judge the writing quality of each of the samples and rate each sample on a scale of 1 to 5. A "1" paper should be representative of the lowest quality paper WITHIN THIS GROUP OF PAPERS, and a "5" paper should be representative of the highest quality paper within this group. This rating is not done against an outside, absolute standard, but within a given set of writing samples. Therefore, it is likely that most of the papers you score will have a rating of "3," indicating they are of average quality for the group as a whole. Fewer papers will be marked with "2" or "4" and fewer still will be given marks of "1" or "5."

The standard for this rating is "effective communication." Other standards for holistic judgments can be made, such as "creativity" or "organization." The definition of good writing given below was developed through the consensus of four experienced special education/learning disabilities teachers following their informal examination and discussion of a set of writing samples from students with learning disabilities.

Use the following *two* criteria for assigning a rating:

#### 1. Definition of good writing:

Good writing clearly communicates to the reader the writer's ideas or story. Good writing requires legible handwriting or printing, as well as distinguishable words, phrases, and sentences. Coherent linking of ideas within and between sentences also contributes to good writing. Good writers have better spelling skills and use more sophisticated vocabulary.

#### 2. A comparison of the sample being rated with range finders:

Range finders can be developed from the samples being scored, or from a similar set of samples (collected from students with the same age/grade and ability levels and collected using the same procedures). Teachers can select their own range finders by skimming the group of papers quickly, and extracting the "typical" paper to represent each of the five scoring categories. It may be helpful to place papers into piles that represent three categories: place "better-than-average" papers in the first pile, "average" papers in the middle pile, and "worse-thanaverage" papers in the last pile. Then by skimming through the "better" papers again, a "best" pile can be formed, and a "worst" pile can be formed from the "worse-than-average" papers. A representative paper then can be pulled from each pile to serve as a range finder for comparison with other papers that need to be scored. Having several teachers rate a set of papers can be helpful. The papers that all or most of the raters select as a "1" can be the range finder for that category, etc. The resulting range finders can be used to score other writing samples collected in the future if care is taken to match

the age/grade and ability levels and the samples are collected, following the same procedures. In Grades K-3 it also is important to match the time of year that the sample range finders are collected because maturation will be evident in the writing of these students.

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