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AUTHOR Niedermeier, Fred C.; And Others
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ABSTRACT

This paper describes status testing conducted by the Southwest Regional Laboratory (SWRL) Composition Skills Program at the primary level. The outcomes of the program range from acquiring letter formation and word spacing proficiencies to writing a composition consistently organized according to a discernible framework and containing varieties of sentence types and descriptive modifiers. In addition to describing the program outcomes, tests, sampling and scoring procedures, and test results, the implications of the data are discussed for the two functions of status testing related to program planning: confirming a requirement for instruction on the proposed outcomes and sequencing the outcomes for instruction. This document also contains the following four appendixes: "Procedures for Kindergarten Test Administration," "Procedures for Third Grade Test Administration," "Legibility Scale for Letter Formation," and "Criteria for Assigning Subjective Ratings." (TS)



SOUTHWEST REGIONAL LABORATORY
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DATE: July 25, 1972

NO. TM 3-72-07

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OF AN INSTRUCTIONAL PROGRAM

AUTHOR: Fred^G Niedermeyer, Edys Quellmalz, and Lee Trithart

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The paper describes status testing conducted for the Laboratory's Composition Skills Program at the primary level. In addition to a description of the program outcomes, tests, sampling and scoring procedures, and test results; the implications of the data are described for the two functions of status testing related to program planning: (1) confirming the need for instruction on the proposed outcomes and (2) sequencing the outcomes for instruction.

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FUNCTIONS OF STATUS TESTING IN THE DEVELOPMENT OF AN INSTRUCTIONAL PROGRAM

Fred Niedermeyer, Edys Quellmalz, and Lee Trithart

Measuring the pre-instructional status of students on the program outcomes has been well-recognized as a useful development procedure. Perhaps the most basic function of such status testing is to confirm that a requirement exists for instruction on the proposed outcomes. Data indicating the extent to which designated sets of pupils have acquired a particular outcome will affect decisions concerning the inclusion of that outcome in the program. It is also possible that status testing may produce information which will lead to the generation of new, additional outcomes.

Status testing can also help to sequence outcomes. Given status scores of pupils across several grade-levels, it is possible to determine the topography of outcome achievement under prevailing conditions of instruction. This in turn suggests the aspects of instruction such students are likely to find easy and difficult.

A third function of status testing is to provide baseline data against which to contrast learner performance at the completion of the instructional program. Thus status testing contributes not only to program planning, but to program evaluation as well.

This paper describes status testing conducted for the Laboratory's Composition Skills Program at the primary level. The outcomes included in the program range from acquisition of letter formation and word spacing proficiencies to writing composition consistently organized according to a discernible framework and containing varieties of sentence types and descriptive modifiers. In addition to a description

of the program outcomes, tests, sampling and scoring procedures, and test results; the implications of the data will be described for the two functions of status testing related to program planning: (1) confirming a requirement for instruction on the proposed outcomes and (2) sequencing the outcomes for instruction.

METHOD

Outcomes to be Tested

Outcomes to be tested were organized according to three areas of written composition: (1) letter formation, (2) editing and (3) composing. Within each area outcomes were tentatively selected and specified for testing in kindergarten through third grade. Outcomes are presented in Figure 1, grouped by the area and the grade levels at which they were tested.

Description of Tests

Initial specifications for the tests are presented in a previous document (Niedermeyer, 1971). Each grade-level test is briefly described below.

Kindergarten. The kindergarten test assessed Outcomes 1 through 7. For Outcome 1, children merely copied 10 letters and numerals printed on the first page of the test. On the second page of the test, 10 different letters and numerals were dictated for the children to write (Outcome 2). Outcomes 3 through 7 were assessed by dictating three short sentences for the children to write. A copy of the kindergarten test and the procedures used by the test administrator are contained in Appendix A. (The procedures indicate the dictated content which does

Figure 1

Outcomes and Grade Levels of Assessment

Outcome	Grade Level Tested			
	K	1	2	3
<u>Letter Formation</u>				
1. Correctly copies small and capital letters and the numbers 1-9	X			
2. Writes small and capital letters and the numbers 1-9 from dictation	X	X		
<u>Editing</u>				
3. Correctly groups letters to form words and leaves spaces between words	X	X	X	X
4. Writes complete sentences	X	X	X	X
5. Capitalizes first letter of a sentence	X	X	X	X
6. Correctly punctuates end of a sentence using a period or question mark	X	X	X	X
7. Capitalizes proper names	X	X	X	X
8. Correctly punctuates a directly quoted sentence in a sentence frame			X	X
9. Capitalizes months of the year			X	X
10. Correctly uses a comma between the day of the month and the year in writing out a date			X	X
11. Capitalizes names of streets, cities and states				X
12. Correctly inserts commas into an address written out in sentence form				X
13. Correctly uses commas to set off nouns in a series				X
14. Correctly uses commas to set off adjectives in a series				X
<u>Composing</u>				
15. Increases the number of words and sentences written in a composition	X	X	X	
16. Avoids sentence run-on's, strings and fragments	X	X	X	
17. Uses a variety of vocabulary in composition writing, including sensory verbs, adjectives, and adverbs and figures of speech	X	X	X	
18. Uses a variety of sentence types in writing compositions	X	X	X	
19. Organizes compositions consistently and well according to (a) chronological, (b) spatial, (c) plot, (d) argument, or (e) other, criteria	X	X	X	
20. Writes a good, interesting story line and expresses it well	X	X	X	

not appear on the copy of the test.)

First Grade. Outcomes 2 through 7 and Outcomes 15 through 20 were assessed at the first-grade level. Outcome 2 was tested by dictating the same 10 letters and numerals as at the kindergarten level. Outcomes 3 through 7 were tested with the same three sentences dictated in kindergarten, plus two additional sentences. Outcomes related to composing (15 through 20) were assessed by having children write a story about an illustration. The illustration showed two children seated in a bus. Directions (read aloud) stated:

Ann and Bud are going somewhere on a bus. Make up and write a story about where Ann and Bud are going and what they see and do. Include some things that Ann and Bud say to each other.

Children were given 15 minutes in which to plan and write their stories. They were then given five minutes to edit their writing. ("Go back and read your story to yourself. If you find mistakes, change them to make them right.")

Second Grade. Editing Outcomes 3 through 10 and Composing Outcomes 15 through 20 were assessed at the second-grade level. (Letter formation was not assessed beyond the first grade.) The same five sentences dictated in first grade were also dictated in second grade along with three additional sentences to assess Outcomes 8, 9 and 10. The same illustration and directions for story writing were also used to assess the composing outcomes. Essentially, the second-grade test was identical to the first-grade test, except it contained no letter formation and it contained three additional dictated sentences by which to assess certain editing outcomes.

Third Grade. The third-grade test was identical to the second-grade test, except that three more dictated sentences were added, for a total of 11, so as to assess Outcomes 11, 12, 13 and 14. A copy of the third-grade test and of the procedures used by the test administrator are contained in Appendix B. First- and second-grade tests are not shown since they were subsets of kindergarten and third-grade tests which may be seen in Appendices A and B.

Sample

Approximately 960 students from eight schools in four urban school districts participated in the testing. To obtain a representative sample of urban subpopulations, pupils were tested from districts in which the populations could be roughly described as white upper-middle-income suburban, white lower-middle-income suburban, bilingual (Spanish-English) lower-income inner-city, and black lower-income inner-city. Children from two schools within each of the districts were tested.

One class in each of the four grade levels (K-3) in each school was tested. Thus, for any one grade level, children from eight classes, approximately 240 pupils, were tested.

Procedures

Tests were administered during a two-week period in Fall, 1971, from November 22 to December 17. A SWRL staff member administered the test to an entire class. Kindergarten testing required approximately 21 minutes: ten minutes for letter dictation, three minutes for sentence dictation, and eight minutes for letter copying. First-grade testing required approximately 30 minutes: five minutes for letter dictation, ten minutes for sentence dictation, and 15 minutes for compo-

sition. Second- and third-grade testing required approximately 35 and 38 minutes respectively: 20 minutes for composition in both grade levels, 15 minutes for sentence dictation in second grade and 18 minutes for sentence dictation in third. Procedures used when administering the tests may be seen in Appendices A and B.

Data Analysis

All completed tests were coded according to district, school, class and grade level. Ten papers from each class were then randomly selected for scoring. Procedures for scoring the items related to the three outcome areas of letter formation, editing and composing are described below.

Letter Formation (Outcomes 1 and 2). Letters printed by the children were rated on a six-point legibility scale. To establish interrater reliability, 40 letters were first rated independently by two judges. Scoring criteria were then refined, and 240 additional letters were rated independently by the judges. The resulting coefficient of agreement was .91. The remaining letters were randomly divided, and each half was rated by one of the two judges. The legibility scale is contained in Appendix C.

Editing (Outcomes 3-14). Editing outcomes related to word spacing, sentence completeness, capitalization, ending punctuation, commas and quotation marks. The sentences dictated in grades one through three were used to assess these outcomes. Three staff members counted capitals, commas, etc. objectively, using procedures established during a previous study (Labeaune, Niedermeyer and Sullivan, 1971).

Composing (Outcomes 15-20). Stories written by the children in grades one through three were analyzed according to both objective and subjective criteria. Writing fluency (Outcome 15) and sentence

correctness (Outcome 16) were measured by simply counting words and sentences. Procedures and agreement correlations for these two outcomes, too, had been previously established (Labeaune, et al., 1971).

Stylistic composing skills (Outcomes 17, 18 and 19) were assessed by counts of different sentence types; different verbs, adjectives and adverbs; different figures of speech (simile and hyperbole); and different organizational structures (chronological, spatial, plot, argument). Before making these counts, the two judges first scored a stratified random sample of fifteen compositions, five from each of the three grade levels. Once scoring criteria were refined, a second stratified random sample of fifteen compositions was scored independently by the two judges. The resulting coefficients of agreement were .93 for sentence variety, .99 for verb variety, .71 for adjective variety, .98 for adverb variety, and .92 for organizational structure. Half of the remaining compositions were randomly assigned for scoring to each judge.

Outcome 20 (good, interesting, well-expressed stories) was assessed by three types of subjective ratings on six-point scales: (1) overall quality, (2) originality and (3) organization. To establish interrater reliability on these measures, judges first scored a random sample of eight compositions. Once scoring criteria were refined, a stratified random sample of fifteen compositions (five from each grade level) was rated independently by the two judges. The resulting coefficients of agreement were .89 for overall quality, .91 for originality, and .88 for organization. Half of the remaining compositions were randomly assigned for rating to each judge. Criteria employed when assigning the ratings may be found in Appendix D.

RESULTS

Scores presented in this section have been summed across the four districts tested. However, for each table in this section, a corresponding table, showing the data broken out by each district, may be found in Appendix E.

Letter Formation

Table 1 shows the distribution of legibility ratings on letter formation outcomes for kindergarten and first-grade children. Although letters written when the kindergarten children copied were somewhat more legible than when the children wrote from dictation, under both conditions the percentages of letters receiving a rating of 4 (quite legible) or higher was quite low, nine percent and one percent, respectively. In first grade the percentage of letters receiving ratings of 4 or 5 was higher, but was still only 32 percent.

Editing

Table 2 presents the percentages of correct responses to items measuring editing skills (Outcomes 3-14) on sentences dictated to children in all four grades. For Outcomes 3 and 4, word spacing and writing all words dictated, second grade children performed these tasks correctly 78 percent of the time. However, the scores on these two outcomes for kindergarten and first-grade children were considerably lower. Scores on outcomes related to initial capitalization (Outcome 5), ending punctuation (Outcome 6), and capitalization of proper nouns (Outcome 7, 9, 11) were

Table 1. Percentage Distribution of Ratings on Letter Formation (Outcomes 1 and 2) given to Kindergarten and First-Grade Children

Rating	Kindergarten Letter Copying	Kindergarten Letter Dictation	First Grade Letter Dictation
5 (very legible)	1	0	3
4 (quite legible)	8	1	29
3 (fairly legible)	27	6	39
2 (barely legible)	42	34	16
1 (completely illegible)	12	39	12
0 (no response)	10	20	1

Table 2. Percentages of Correct Responses on Editing Outcomes as Measured through Sentences Dictated to Kindergarten, First-, Second- and Third-Grade Children

Outcomes	Kg	First Grade	Second Grade	Third Grade
3. Spacing: All words discernible as distinct units	3	42	78	82
4. Sentence Complete: All words present	6	47	78	82
5. Initial Capitalization: Correct capitalization of initial letter of sentence	3	40	52	63
6. Ending Punctuation: Correct ending punctua- tion	6	5	24	40
7, 9, 11. Capitalization: Correct capitalization of proper nouns	1	17	34	28
8. Quotes: Quotes correctly placed around words, punctuation marks placed correctly	--	--	0	0
10, 12-14. Commas: Comma present in correct place	--	--	5	4

lower than 50 percent across all grade levels. Scores on comma and quote insertion (Outcomes 8, 10, 12-14) were lower than five percent.

Composing

Table 3 displays the .1 standard deviations for the total number of words and sentences in stories written by first-, second-, and third-grade children (Outcome 15). There is a steady increase in the average number of words and sentences from grade to grade. However, the mean number of sentences is only 0.9, 1.9 and 3.6 across the three grade levels, respectively.

Table 4 shows the percentages of complete sentences, sentence strings, sentence fragments, and run-on sentences in stories written by first-, second-, and third-grade children (Outcome 16). It may be seen that the proportion of complete sentences never rises above two-thirds at any grade level. Less than half of the sentences written by first and second graders are complete. In the first grade, "Sentence fragments" form the major error category (38 percent). "Run-on sentences" form the error category in second and third grade (27 and 23 percent, respectively).

Table 5 shows the mean number of different sentence types, verbs, adjectives, and adverbs in stories written by first-, second-, and third-grade children. The variety of sentences is less than one in the first grade, a figure in agreement with the mean of less than one sentence in the average first grade story (Table 3). Sentence, verb and adverb variety all increase from first through third grades. These increases, of course, correspond to the increase in fluency of compositions at successive grade levels. It should be noted that adjective

Table 3. Means and Standard Deviations of Total Words and Sentences in Stories (Outcome 15) Written by First-, Second- and Third-Grade Children

		First Grade	Second Grade	Third Grade
Number of Words	\bar{X}	7.0	24.0	42.2
	s.d.	8.1	15.9	27.7
Number of Sentences	\bar{X}	0.9	1.9	3.6
	s.d.	1.0	1.8	3.3

Table 4. Percentages of Complete Sentences, Sentence Strings, Sentence Fragments, and Run-On Sentences (Outcome 16) in Stories Written by First-, Second- and Third-Grade Children

	First Grade	Second Grade	Third Grade
Complete Sentences	45	48	67
Sentence Strings	1	11	4
Sentence Fragments	38	14	6
Run-On Sentences	16	27	23

Table 5. Style Analysis of Stories Written By
First-, Second- and Third-Grade Children

STYLE COMPONENT		First Grade	Second Grade	Third Grade
Sentence Variety ¹	\bar{X}	.80	2.39	2.94
	s.d.	.98	1.46	1.54
Verb Variety ²	\bar{X}	.95	4.12	5.48
	s.d.	1.39	3.13	3.78
Adjective Variety ²	\bar{X}	0.06	0.72	1.18
	s.d.	0.24	1.28	1.33
Adverb Variety ²	\bar{X}	0.46	2.25	4.44
	s.d.	0.84	1.87	3.75

¹Mean number of sentence types: total possible = 10

²Mean number of different verbs, adjectives or adverbs used in compositions

variety remains quite low throughout, with an average of approximately one single adjective or less per composition in all grade levels.

Subjective ratings of quality, originality, and organization of stories written by first-, second-, and third-grade children are displayed in Table 6. Although ratings on all three dimensions tend to increase from grade level to grade level, very few stories received ratings of 4 or 5.

Table 7 indicates the percentages of types of organization in the first-, second-, and third-grade compositions. Chronological organization is the only type which occurs with any appreciable frequency. A moderately high proportion of the compositions in second and third grade (approximately 60 percent) are of this organizational type. Plot (conflict and resolution) is the second most common organizational type. The decrease in the proportion of compositions put into the "none" category reflects the fact that more children were at least attempting to write a composition, since a paper was put into this category when no composition was present. Most of the compositions falling into the "other" category were a series of statements about the stimulus picture, unorganized by space and with no hint of events coming before or after those portrayed in the picture.

DISCUSSION

The tests administered to primary-grade children to assess their status with respect to proposed composition skills outcomes (Figure 1) yielded pre-instructional data appropriate for program formulation. The data enabled planning decisions to be made regarding the scope

Table 6. Percentage Distribution of Subjective Ratings of Quality, Originality, and Organization of Stories Written by First-, Second- and Third-Grade Children

Measure: Grade:	Overall Quality			Originality			Organization		
	1	2	3	1	2	3	1	2	3
<u>Ratings</u>									
5 (Excellent)	0	0	1	0	0	0	0	0	0
4 (Good)	0	5	5	0	5	13	0	3	5
3 (Fair)	3	19	38	1	21	36	3	17	36
2 (Somewhat Inadequate)	20	50	46	16	40	35	15	36	46
1 (Extremely Inadequate)	25	16	7	25	20	11	26	29	8
0 (No Response)	52	10	3	58	14	5	56	15	5

Table 7. Percentages of Types of Organization in Stories Written by First-, Second- and Third-Grade Children

Organizational Type	First Grade	Second Grade	Third Grade
Chronological	17	60	59
Spatial	0	0	1
Plot	0	2	11
Argument	3	0	0
Other	24	24	24
None	56	14	5

and sequence of the various outcomes. First, the data revealed the extent to which instruction on an outcome was required at the primary-grade level. Second, the data facilitated decisions regarding the level at which instruction on an outcome should commence. Discussion of the data and resulting decisions is organized below according to outcome areas.

Letter Formation Outcomes

Most of the letters and numerals written by kindergarten children were barely legible. At the same time, very few of the children failed to respond at all, i.e., almost all of the children attempted to print. Thus, it seems feasible to introduce formal handwriting instruction in kindergarten. Results of these efforts will eventually indicate how much additional instruction, if any, will be required at first grade. Presently, most of the letters written by beginning first graders are fairly legible (or better), but systematic instruction in kindergarten should produce even more competent first-grade printers.

Editing Outcomes

The need for instruction on all proposed editing outcomes at the primary-grade level was confirmed by the status data. Instruction on writing complete sentences, spacing words correctly, capitalizing the first word in a sentence, punctuating the end of a sentence, and capitalizing proper names (Outcomes 3 through 7 in Figure 1) will begin in first grade. (The data indicate extremely low scores on these outcomes by beginning kindergarteners, and instruction at this level will emphasize Outcomes 1 and 2---letter formation.) Instruction on

capitalizing additional nouns, using commas correctly, and punctuating quotations. Outcomes 8 through 14 will take place in the second and third grades.

Composing Outcomes

Analysis of the stories written by first, second and third graders revealed rather low fluency in terms of the number of words and sentences written (Outcome 15). Consequently, it is doubtful that much instruction on composing outcomes such as type of organization (Outcome 19) and planning interesting story lines (Outcome 20) can take place if children beginning second grade are able to write stories only two sentences in length, containing only 24 words. Thus, an attempt will be made in first grade to generate writing fluency as a prerequisite for planning and composing instruction in second and third grades. Initial efforts toward attaining this goal have been fairly successful (see Sullivan, Okada and Niedermeyer, 1971.)

Instruction on avoiding run-on sentences and sentence strings (Outcome 16) will begin at the second-grade level. Avoiding sentence fragments will be a part of the first-grade exercises designed to increase writing fluency.

Variety in sentences and word usage Outcomes 17 and 18 seems to increase largely as a function of increasing writing fluency, suggesting the value of fluency instruction. These data seem to confirm input from linguists, which suggests that these outcomes develop naturally in standard spoken expression and transfer easily to written expression once writing fluency has been attained. Thus, these outcomes will not be attacked directly in the composition skills program, but will be treated indirectly through training in planning and fluency.

Ratings of overall quality and organization (Outcomes 20 and 19) were generally poor across all grade levels---very few stories received higher than a "fair" rating. Many stories, particularly in first grade, showed a lack of criteria for organization, compounding the difficulties caused by lack of writing fluency. At all grade levels it seems likely that children are unable to organize compositions well because they receive very little systematic instruction and practice on this task. The SWRL Composition Skills Program will attempt systematic development of children's abilities for planning written composition, beginning in the first grade. It is expected that instruction on fluency, planning, organization, and editing, will result in an improvement in the overall quality of children's composition.

In addition to facilitating program formulation as described above, the data from the status testing will be useful for subsequent program evaluation. The baseline data gathered in this study can be used to evaluate development efforts in succeeding years as instructed children are tested.

REFERENCES

Labeaune, Niedermeyer and Sullivan, "1971 Tryout of the Second-Grade Composition Skills Exercises," SWRL TN 3-71-20, August 20, 1971.

Niedermeyer, Fred D., "Specifications for the SWRL K-3 Composition Skills Program," SWRL TN 3-71-18, September 8, 1971.

Sullivan, Niedermeyer and Okada, "Development of First Grader's Composition Skills," SWRL Professional Paper 16, August 31, 1972

APPENDIX A

Procedures for Kindergarten Test Administration

PART I

Directions:

- Give each child a pencil and answer sheet.
- Tell the children they are going to practice writing.
- Ask each child to put his name on his answer sheet.
- Tell the children that when you say a letter or number, they are to write it on their paper.
- Tell them that sometimes you will ask them to write a small letter and sometimes a capital letter. As an example, show the children a "Capital H" and a "little h" (use chalkboard) and name each letter.
- Ask the children to listen carefully and that you will say each letter or number two times.
- Tell the children to do the best they can and not to look at someone else's paper.
- Begin reading each item. Say it once. Wait about 5 seconds, then repeat it. Check that the children are writing in the appropriate spaces. Discourage copying.

1.	"Find the picture of the <u>chair</u> . On the lines next to the <u>chair</u> , write a Capital E."
2.	" shoe " shoe " little t."
3.	" flower " flower " little c."
4.	" bicycle " bicycle " Capital O."
5.	" house " house " Capital A."
6.	" bottle " bottle " Capital N."
7.	" car " car " little b."
8.	" Kitty " Kitty " little g."
9.	" flag " flag " number 7."
10.	" bird " bird " number 5."

PART II

Directions:

- Ask the children to find the long lines at the bottom of the page.
- Explain that they are now going to write short sentences as you say them.
- Tell them that they should try to write and spell each word as best they can.

- Ask the children to listen carefully, as you will say each sentence only two times.
- Begin reading each sentence. Say the words slowly once. Wait about 5 seconds then repeat the sentence.
- Check that the children are writing the sentence on the appropriate line.

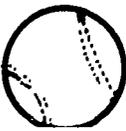
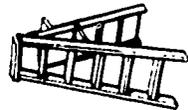
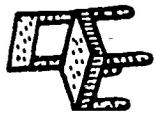
1. "Find the picture of the candy cane. Next to the candy cane, write, "See me."
2. " " ladder " ladder " "She is Ann."
3. " " ball " ball " "Is he mad?"

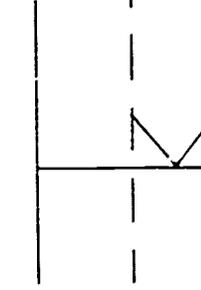
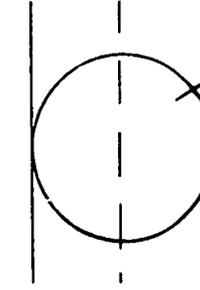
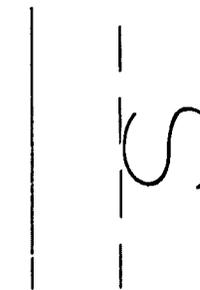
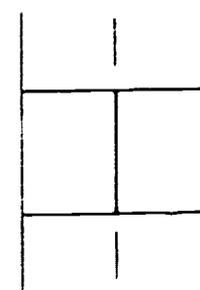
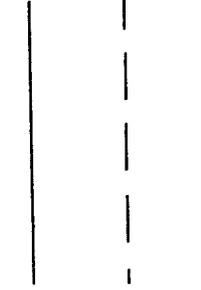
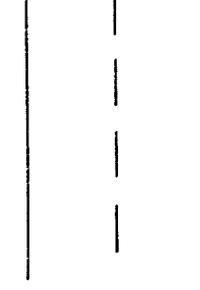
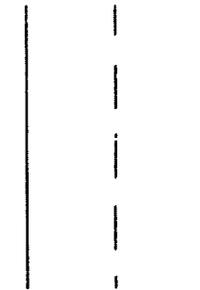
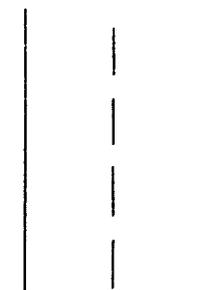
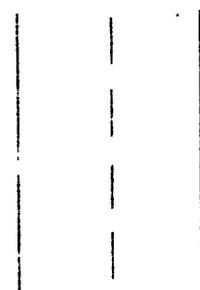
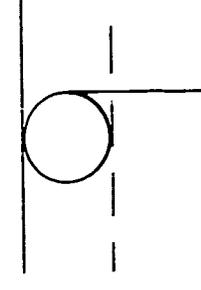
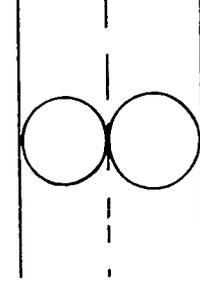
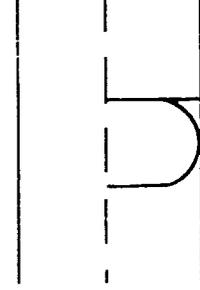
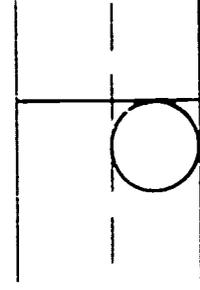
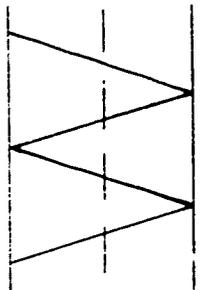
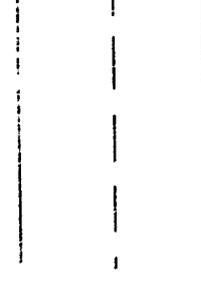
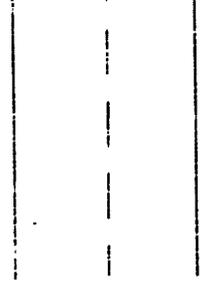
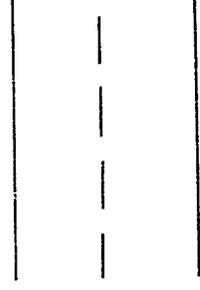
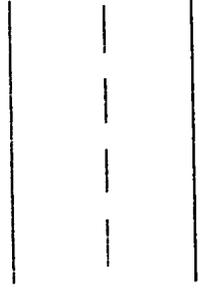
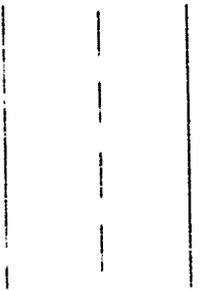
PART III

Directions:

- Ask the children to turn their papers over.
- Explain that they are now going to copy each letter on the lines next to the letter.
- Collect papers when most children are finished. (Do not take more than 10 minutes for this part of the test.)

Name _____





APPENDIX B

Procedures for Third Grade Test Administration

PART I

Directions:

- Give each child a pencil and answer sheet.
 - Tell the children they are going to practice writing.
 - Ask each child to put his name on his answer sheet.
 - Tell the children that you are going to read them some short sentences.
 - Explain that they should try to write the sentences as you read them.
 - Tell the children that they should try to write and spell each word as best they can.
 - Ask the children to listen carefully, as you will say each sentence only two times.
 - Begin reading each sentence. Say the words slowly once. Wait about 5 seconds then repeat the sentence.
 - Check that the children are writing on the appropriate line.
-

1. See me.
 2. She is Ann.
 3. Is he mad?
 4. I fell in the mud.
 5. Can Ed play?
 6. Bob said, "Can you find it?"
 7. Is it June 2, 1971?
 8. "We will meet Mom," Dad said.
 9. Send it to 23 Park Street, Kingtown, New York.
 10. He ate rice, candy, and soup.
 11. We saw a big, old, brown bear.
-

PART II

Directions:

- Ask the children to turn to the next page.
- Explain they are going to write a story about the picture at the top of page.
- Read the following introduction to the children. Do not elaborate on this introduction.

Ann and Bud are going somewhere on a bus. Make-
us a short story about where Ann and Bus are
going and what they do. Include some things that
Ann and Bud say to each other.

-Point out the first line and explain that they should write the
title of their story on it before they begin actually writing
the story.

-After 15 minutes, tell the children to stop. Read them the
following directions:

Go back and read your story to yourself. If you
find mistakes, change them to make them right.

-Wait 3-5 minutes and collect the papers.

Name _____

1

2

3

4

5

6

7

8

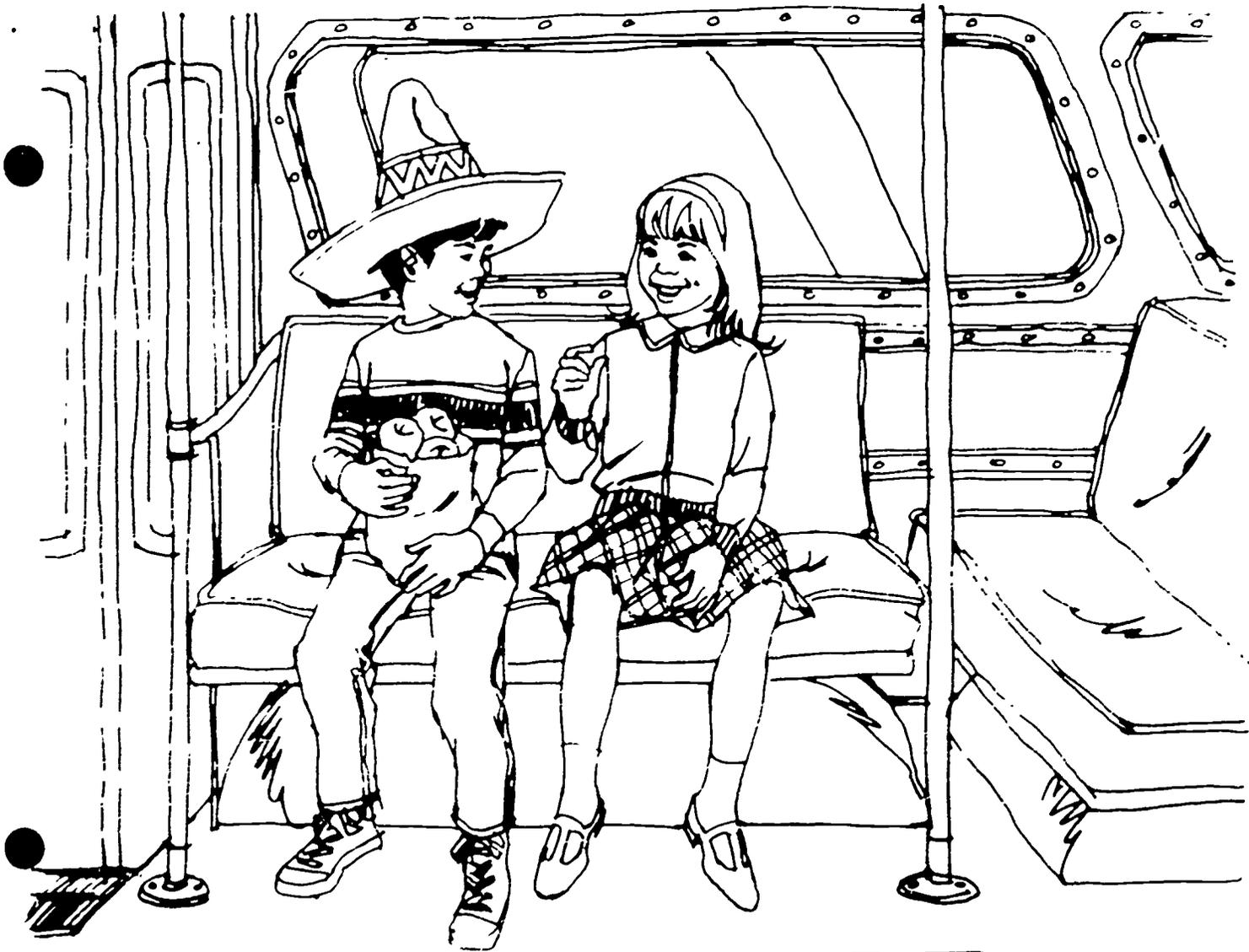
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10



11



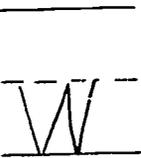
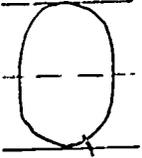
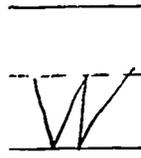
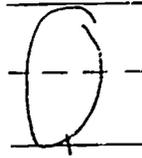
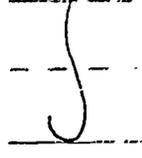
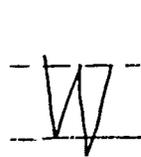
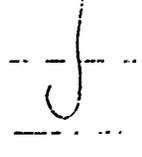
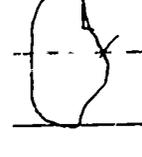
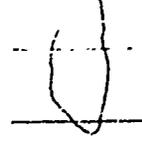
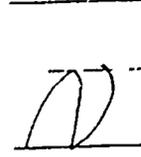
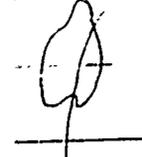
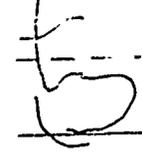
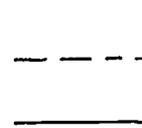
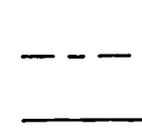




APPENDIX C

Legibility Scale for Letter Formation

Evaluating the quality of letters the children make involves judgements about the appropriateness of the shape of a letter and its degree of legibility. To score a child's test, rate each of his letters using the six point legibility scale below.

RATING	MEANING	EXAMPLES		
5	VERY LEGIBLE: Letter matches model. practice is required.			
4	QUITE LEGIBLE: Letter closely approximates model's size and shape. Some additional practice may be desirable.			
3	FAIRLY LEGIBLE: Letter deviates somewhat from model's size and shape. Additional practice is necessary.			
2	BARELY LEGIBLE: Letter's size and shape deviate markedly from model, or letter is well-formed but outside guide line. Substantial instruction and practice is necessary.			
1	ILLEGIBLE: Letter does not approximate model. Letter is reversed or inverted. Capital letter is written in place of small or vice versa. Any sort of mark is present around the appropriate blank.			
0	NO RESPONSE: Pencil marks are completely absent around the area of the appropriate blank.			

APPENDIX D

Criteria for Assigning Subjective Ratings

Spring '72

Overall Quality: (to be scored first) rating (0-5) based on:

1. Originality
2. Organization (does it follow a logical sequence)
3. Sentence variety
4. Variety of vocabulary
5. Punctuation (ending punctuation, commas, quotes)
6. Word spacing
7. Handwriting

Originality: rating (0-5) of how good or interesting the story line and way of expressing it are.

Organization: rating (0-5) based on how consistently and well the organizational method used was followed.

Caution: The fact that a story's organizational type is rated as "Other" should not influence the quality rating given to the organization of the story. Any organization type may receive any quality rating.

Rate each child's composition using the six-point scale below:

- 5 Excellent
- 4 Good
- 3 Fair
- 2 Somewhat Inadequate
- 1 Extremely Inadequate
- 0 No Composition Present

APPENDIX E

Status Data Broken Out by School Districts

Table 1a

Percentage Distribution of Ratings on Letter Formation Tests (Outcomes 1 and 2) Given to Kindergarten and First Grade Children from Four Urban School Districts

Rating	Kindergarten Letter Copying				Kindergarten Letter Dictation				First Grade Letter Dictation			
	A	B	C	D	A	B	C	D	A	B	C	D
5 (very legible)	1	0	1	1	0	0	0	0	5	5	3	2
4 (quite legible)	15	6	9	3	2	1	0	0	50	31	21	15
3 (fairly legible)	27	27	26	28	9	9	3	5	43	50	30	32
2 (barely legible)	40	45	49	35	49	39	10	37	2	10	25	27
1 (completely illegible)	9	12	7	20	29	34	42	53	0	4	20	24
0 (no response)	8	10	8	13	11	17	45	5	0	0	1	0

A: white upper-middle-income suburban
 B: white lower-middle-income suburban
 C: bilingual (Spanish-English), lower-income inner-city
 D: black lower-income inner-city

TABLE 2a

Percentages of Correct Responses on Editing Outcomes as Measured Through Sentences Dictated to Kindergarten, First-, Second-, and Third-Grade Children from Four Urban School Districts

Outcome	Kindergarten			First Grade			Second Grade			Third Grade					
	District			District			District			District					
	A	B	D	A	B	D	A	B	D	A	B	D			
3. Spacing: All words discernible as distinct units	8	4	0	85	57	15	9	86	84	76	51	86	92	75	76
4. Sentence Completion: All words present	15	9	0	86	60	19	23	92	91	84	46	96	86	78	68
5. Initial Capitalization: Correctly capitalized initial letter of sentence	7	4	0	64	43	15	36	72	56	41	41	85	76	33	58
6. Ending Punctuation: Correct ending punctuation	0	0	0	19	0	0	1	38	25	32	2	77	50	13	20
7, 9, 11. Capitalization: Correctly capitalized proper nouns	0	0	0	48	15	5	0	46	38	29	22	42	23	23	26
8. Quotes: Quotes correctly placed around words, punctuation marks placed correctly	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0
10, 12-14. Commas: Comma present in correct place	-	-	-	-	-	-	-	5	10	5	0	7	1	2	5

TABLE 3a

Means and Standard Deviations of Total Words and Sentences in Stories (Outcome 15)
Written by First-, Second- and Third-Grade Children from Four Urban School Districts

	First Grade				Second Grade				Third Grade				
	District				District				District				
	A	B	C	D	A	B	C	D	A	B	C	D	
Number of Words	\bar{X}	12.2	11.7	0.6	3.8	32.1	23.8	28.8	11.3	73.7	38.6	23.9	32.8
	s.d.	5.8	10.0	1.3	5.1	19.0	8.6	15.1	10.0	28.9	15.2	11.7	20.9
Number of Sentences	\bar{X}	1.6	1.0	0.2	1.0	3.2	2.2	1.4	0.8	6.1	3.5	1.6	3.3
	s.d.	0.8	0.9	0.4	1.2	2.5	1.4	0.8	0.5	4.2	2.5	1.2	2.7

TABLE 4a

Percentages of Complete Sentences, Sentence Strings, Sentence Fragments, and Run-On Sentences (Outcome 16)
in Stories Written by First-, Second and Third Grade Children from Four Urban School Districts

	First Grade				Second Grade				Third Grade			
	District				District				District			
	A	B	C	D	A	B	C	D	A	B	C	D
Complete Sentences	64	55	0	32	59	60	28	7	70	71	48	67
Sentence Strings	0	5	0	0	11	4	28	0	7	4	3	2
Sentence Fragments	19	35	100	58	16	13	7	20	4	0	12	12
Run-On Sentences	16	25	0	10	14	22	38	73	20	24	36	20

TABLE 5a

Style Analysis of Stories Written by First-,
Second-, and Third-Grade Children from Four Urban School Districts

STYLE COMPONENT	First Grade				Second Grade				Third Grade				
	District				District				District				
	A	B	C	D	A	B	C	D	A	B	C	D	
Sentence Variety ¹	\bar{X}	1.60	1.15	.05	.40	3.20	2.20	2.70	1.45	4.20	2.65	2.35	2.60
	s.d.	.73	1.15	.22	.66	1.36	1.12	1.58	1.12	1.29	1.19	1.39	1.56
Verb Variety ²	\bar{X}	2.00	1.45	.05	.30	7.15	3.10	4.05	2.25	9.75	4.70	3.30	4.10
	s.d.	1.38	1.69	.22	.56	3.54	1.81	2.38	2.19	3.24	2.81	1.95	5.11
Adjective Variety ²	\bar{X}	.20	0.00	0.00	.05	1.45	.75	.70	0.00	2.60	0.95	0.50	0.65
	s.d.	.40	0.00	0.00	.22	1.46	1.44	1.14	0.00	1.53	0.74	0.81	0.85
Adverb Variety ²	\bar{X}	1.15	.45	0.00	.25	3.35	1.80	2.70	1.15	8.40	3.75	2.65	2.95
	s.d.	1.11	.74	0.00	.54	2.26	1.17	1.81	1.19	4.59	2.26	1.19	2.67

¹ Mean number of sentence types: total possible = 10

² Mean number of different verbs, adjectives, or adverbs used in compositions

TABLE 6a

Percentage Distribution of Subjective Ratings of Quality, Originality, and Organization of Stories Written by First-, Second-, and Third-Grade Children from Four Urban School Districts

Ratings	Overall Quality				Originality				Organization			
	District				District				District			
	A	B	C	D	A	B	C	D	A	B	C	D
5 (Excellent)	0	0	0	0	0	0	0	0	0	0	0	0
4 (good)	0	0	0	0	0	0	0	0	0	0	0	0
3 (fair)	0	10	0	0	5	0	0	0	10	0	0	0
2 (somewhat inadequate)	60	20	0	0	40	25	0	0	40	20	0	0
1 (extremely inadequate)	30	30	5	35	40	35	0	25	40	40	0	25
0 (no response)	10	40	95	65	15	40	100	75	10	40	100	75
	1st Grade				1st Grade				1st Grade			
	2nd Grade				2nd Grade				2nd Grade			
5 (Excellent)	0	0	0	0	0	0	0	0	0	0	0	0
4 (good)	20	0	0	0	10	0	10	0	10	0	0	0
3 (fair)	35	5	20	15	50	5	20	10	45	10	10	5
2 (somewhat inadequate)	40	65	55	40	25	65	50	20	35	45	50	15
1 (extremely inadequate)	0	25	20	20	10	15	15	40	5	30	35	45
0 (no response)	5	5	5	25	5	15	5	30	5	15	5	35
	2nd Grade				2nd Grade				2nd Grade			
	3rd Grade				3rd Grade				3rd Grade			
5 (Excellent)	5	0	0	0	0	0	0	0	0	0	0	0
4 (good)	20	0	0	0	40	5	0	5	15	5	0	0
3 (fair)	55	40	25	30	55	45	30	15	55	45	20	25
2 (somewhat inadequate)	20	55	55	55	5	35	45	55	30	40	55	60
1 (extremely inadequate)	0	5	15	10	0	15	20	10	0	10	20	0
0 (no response)	0	0	5	5	0	0	5	15	0	0	5	15



TABLE 7a

Percentages of Types of Organization in Stories Written by
First-, Second-, and Third-Grade Children from Four Urban School Districts

TYPE	First Grade				Second Grade				Third Grade			
	District				District				District			
	A	B	C	D	A	B	C	D	A	B	C	D
Chronological	50	20	0	0	90	65	55	30	55	70	60	50
Spatial	0	0	0	0	0	0	0	0	5	0	0	0
Plot	0	0	0	0	0	5	0	5	40	0	0	5
Argument	5	0	0	5	0	0	0	0	0	0	0	0
Other	35	40	0	20	5	15	40	35	0	30	35	30
None	10	40	100	75	5	15	5	30	0	0	5	15

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