The Templin Longitudinal Study included a large number of measures devoted to auditory perception, visual perception, and motor measures (rhythm, handwriting, and the oral mechanism). Most of the perceptual measures were administered in Kindergarten or first grade.

Measures Based on an Auditory Stimulus

**Spencer Synthesis of Words, Rhyming Words, and Identification of Initial Sounds (SRI—Spencer, 1958)***

Administered at Sessions 3 (Spring 1961, Kindergarten) and 5 (Spring 1962, Grade 1)
Raw data are in data box #7 for Session 3 and boxes #11 and #13 for Session 5

Note: These tests are related to the Spencer Nonsense Word Test (also called the Spencer Nonsense Repetition Test, or the Spencer Nonsense Word Articulation Test), which is described under Articulation Measures, but with additional items.

In the Spencer Synthesis task, the child was asked to synthesize words from two or three syllables, e.g. from *ba – by or um - brel - la*. First 8 words broken into syllables were presented, then 8 words broken into phonemes. The maximum score for each part was 8, for a synthesis total of 16.

In the Spencer Rhyming Words test, the child’s task was to determine which word from among several choices rhymed with a test word. There were five items in which the rhyming word was identified from among 8 pictures, i.e. *cup, cat, bus, bed, horn, tent, coat, and bread*, to rhyme with *sat, boat, corn, us, and sent*. One demonstration item was provided. Then the child was asked to think up rhyming words for another five items without picture support. The words were *hear, tree, fair, nose, and fun*. There was one demonstration item. The maximum total score with picture support was 5, without picture support was 5, for a rhyming words total, with a maximum value of 10.

In the Spencer Identification of Initial Sounds task, the child was asked to identify pictures whose name began with selected single sounds presented aurally. The child first named 15 pictures, then was asked to locate a picture that began with the single sound uttered by the examiner. The 15 pictures were as follows, with the ten test items asterisked:

- meat
- *sock
- *table
- iron
- *feather
- baby
- *wagon
- bike
- mittens
- *chicken
- *hammer
- *lamp
- *candy
- *apple
- *doll
In Session 3 the test was discontinued if the child failed to pass the first three items after several preliminary demonstrations. In Session 5 the whole test was always given. The maximum possible score was 10.

For each task, Session 3 subscores (if any) and then a total score are entered into columns 40-51 on Card 1, Session 3, and for Session 5, into the same columns on Card 1, Session 5.
Monroe Sound Discrimination (also called Monroe Auditory I)  
Administered in Session 4 (Fall 1961, Grade 1)  
Raw data are in data box #16

This is the Auditory I Test in the *Monroe Reading Aptitude Tests* (Monroe, 1935). It consists of nine line drawings of a *boat, cup, hen, hand, basket, rat, flower, hammer,* and *streetcar.* For each, the child is asked to identify the correct pronunciation of the pictured object from among three “words” differing in only one phoneme that are said allowed by the examiner. The child’s response was to point to the number corresponding to the correct version. The maximum score was 9, including two practice items.

The score is entered into column 21 on Card 1, Session 4.
Monroe Synthesis of Words Test (also called Monroe Auditory II)
Administered in Session 4 (Fall 1961, Grade 1)
Raw data are in data box #16

This is Auditory II Test in the *Monroe Reading Aptitude Tests* (Monroe, 1935). The child is to identify each of the following 12 pictures by synthesizing the separate sounds of the word uttered by the examiner: *shoe, cat, mother, house, track, pan, lap, peas, engine, puddle, gate,* and *bud.* There are three picture foils for each word. For example, for *house,* the three foils are *horse,* *house,* and *mouse.* The maximum score is 12.

The score is entered into columns 22-23 on Card 1, Session 4.
Templin Sound Discrimination Test (Templin, 1957)
Administered in Session 3 (Spring 1961, Kindergarten) and Session 5 (Spring, 1962, Grade 1)
Raw data are in data box #7 for Session 3 and in #13 for Session 5.

In Session 5, this test was administered by speech clinicians with the Minneapolis Public Schools. The test consists of 50 pairs of syllables that have been found most discriminating and that were used in earlier work by Templin. Each pair, either an identical pair (e.g. le___le) or a minimal pair (e.g. et___etf), was spoken by the examiner. The child was expected to respond with “Same” or “Different.” The score is the number of correct responses, with a maximum of 50.

The child’s Session 3 score is entered into columns 52-53 on Card 1, Session 3. For session 5, the score is entered into columns 52-53 on Card 1, Session 5.
Harrison-Stroud Matching Sounds I (also called Harrison-Stroud 4)
Administered in Session 4 (Fall 1961, Grade 1)
Raw data are in data box #16

This is Test 4 from the *Harrison-Stroud Reading Readiness Profiles* (Harrison and Stroud, 1956). The child sees three line drawings in each item box, one on the left and two on the right. The child’s job is to listen to the examiner as she says the first item and then the other two. Then the child draws a line from the item on the left to the item on the other side that begins with the same sound as the first item. One point is given for each correct response, with a maximum score of 16.

The score is entered into columns 24-25 on Card 1, Session 4.
Harrison-Stroud Matching Sounds II (also called Harrison-Stroud 5)
Administered in Session 4 (Fall 1961, Grade 1)
Raw data are in data box #16

This is Test 5 from the Harrison-Stroud Reading Readiness Profiles (Harrison and Stroud, 1956). The child’s task is to identify an initial sound from within a category for 18 items. For example, pictures of ring, rabbit, and calf are presented and the child is told the following story and then asked to identify the pet that ran away: “Roy had two pets on his grandfather’s farm. One pet ran away. The pet that ran away begins like Roy’s name.” The maximum score is 18.

The score is entered into columns 26-27 on Card 1, Session 4.
Auditory Memory Test
Constructed by N. Cowan and M.C. Templin
Administered in Session 7 (Spring 1963, Grade 2)
Raw data are in data boxes #4 and 5

This test has four parts, as follows:

   Part I. Digit Repetition (Recall). It contains seven items in which two to nine
digits are to be repeated back after the examiner says them. There are two samples for
each length, and only one needs to be correct for the child to be credited with that digit
span. The child’s score is the highest number of digits that he or she repeats correctly,
for a maximum of 9.

   Part 2. Word Repetition (Recall). This part consists of six items in which three to
six unrelated single-syllable words are to be repeated in the appropriate order. There is
only one set of words for each length. The child’s score is the highest number of words
that she or he repeats correctly, for a maximum score of 6.

   Part 3. Story Comprehension. A one-paragraph passage called The School
Concert from the Revised Stanford-Binet Intelligence Scale (Terman & Merrill, 1937) is
read to the child. The examiner then asks the child 6 questions about the passage. The
maximum score is 6.

   Part 4. Sentence Repetition (Recall). In this task the examiner produces nine
sentences that range in length from 5 to 21 words. The child is to repeat the sentence.
The score is the number of words in the longest sentence that is repeated correctly, for a
maximum score of 21. The scores from the four parts are added together for a total score
with a maximum value of 42.

The score for each subtest as well as the total score are entered into columns 27, 28, 29,
30-31, and 32-33, respectively, on Card 1, Session 7.
The Spencer Nonsense Recall Test (Spencer, 1958)
Administered in Session 3 (Spring 1961, Kindergarten) and in Session 5 (Spring, 1962, grade 1)
Raw data are located in data boxes #6 and 17, respectively

Note: This measure is different from the Spencer Nonsense Articulation or the Spencer Nonsense Repetition Test, which is described under Measures of Articulation.

In Session 3, this test was administered by the project examiners. In Session 5, the test was administered by speech clinicians with the Minneapolis Public Schools. In this test, the child was asked to repeat nonsense syllable strings varying from 2 to 5 syllables in length, with 3 tokens for each length. The examiner presented the syllables at the rate of “slow distinct speech.” Two scores were obtained. The first score was the number of items in which both the number of syllables and the articulation of the sounds in the entire phrase were correct. The second score was the number of items to which the child responded with the correct number of syllables, regardless of articulation. For each score, the maximum value was 12. However, only the first score is entered into the database.

The Session 3 scores are entered into columns 29-30 on Card 1. The Session 5 scores are entered into columns 29-30 on Card 1.
Measures Based on a Visual Stimulus

Metropolitan Readiness Test
Administered at Session 4 (Fall 1961, Grade 1)
Raw data are in data boxes #15 and 16

The Metropolitan Readiness Test, Form R (Hildreth and Griffiths, 1949) was designed for use at the end of kindergarten or at the beginning of the first grade. Six separate subtests make up the test. They are:

- **Word Meaning.** The child selects the picture named by the examiner from among four foils. The maximum score is 19.
- **Sentences.** The child selects the picture about which the examiner has read a sentence. There are four foils. The maximum score is 14.
- **Information.** The child selects from among 4 pictures the one that best corresponds to the examiner’s description. The descriptions generally concern the item’s function. The maximum score is 14.
- **Matching.** This subtest involves the recognition of visual similarities. Each item contains four pictures, and in the center is a fifth picture with a frame around it. The fifth picture matches one of the other four pictures. The child’s task is to identify the matching pictures. The categories of pictures include simple and complex shapes, objects, numbers, and letters. The maximum score is 19.
- **Numbers.** This subtest presents the child with material related to numbers and quantity. The examiner provides a verbal instruction. For example, one picture shows a farmer with a line of seven chickens in front of him. The examiner says, “Look at the farmer and his chickens. Mark the seventh chicken from the farmer.” The maximum score is 24.
- **Copying.** The child copies capital letters, shapes, figures, and numbers. The maximum score is 10.

The total score for the test is the sum of the scores of the subtests, and the maximum total score is 100.

The subtest scores are entered into columns 28-29, 30-31, 32-33, 34-35, 36-37, and 38-39 on card 1, Session 4. The total score is entered into columns 40-41 on the same card. Presumably, no child had a total score of 100.
Murphy-Durrell Matching Letters  
Administered at Session 4 (Fall 1961, Grade 1)  
Raw data are in data box #15

The first 26 items from the *Diagnostic Reading Readiness Tests* (Murphy & Durrell, 1949) constitute the Matching Letters subtest. The examiner shows the child a card with a lower-case letter written on it. The child has five foils from which to choose a match. The maximum score is 26.

The child’s score is entered into columns 42-43 on Card 1, Session 4.
Murphy-Durrell Matching Words
Administered at Session 4 (Fall 1961, Grade 1)
Raw data are in data box #15

The last 26 items from the *Diagnostic Reading Readiness Tests* (Murphy & Durrell, 1949) constitute the Matching Words subtest. The examiner shows the child a card with a lower-case word written on it. The child has five lower-case foils from which to choose a match. The maximum score is 26.

The child’s score is entered into columns 44-45 on Card 1, Session 4.
Clymer Picture Squares
Administered at Session 4 (Fall 1961, Grade 1)
Raw data are in data box #15

This test was developed for research use by Clymer (Personal communication with MCT). It has a series of nine pictures massed into squares containing three rows of three pictures each. The task for the child is to draw a line between the two identical pictures in each of the 18 squares within two minutes. There were four practice items. Three scores were obtained:

- the number of correct items, maximum score 18,
- the number of items attempted, maximum score 18, and
- the ratio of the first to the second, given as a percent, with a maximum score of 100.

The first two scores are entered into columns 54-55 and 56-57, respectively. The percent score apparently is not entered.
Gates Primary Reading Test: Recognition of Digits, Capital and Lower Case Letters
Administered at Session 4 (Fall 1961, Grade 1)
Raw data are in data box #15

This task is taken from the Gates Primary Reading Test (1958). The child orally identifies capital letters, lower case letters and the digits 0 through 9. The corresponding maximum scores are 26, 26, and 10. The subscores are totaled for a maximum of 62.

The scores are entered into columns 46-47, 48-49, and 50-51, respectively, and the total score is entered into columns 52-53 on Card 1, Session 4.
Measures Related to Motor Abilities

The Stambak Test of Rhythm
Administered in Session 11 (Spring 1965, Grade 4)
Raw data are in data box #24

Two of the three separate tasks in the Stambak Test of Rhythm (Zazzo, 1960) are included in the analyses. They are:

- Task 1 and Task 4. A spontaneous tapping rate task, which was given as the first and last item. The child was asked to tap the table with a pencil eraser over and over again until told to stop. The score was the time in tenths of seconds taken to tap 21 times, with the timing begun after five or six taps. The score for the first attempt was entered into columns 49-51 on Card 1, Session 11. A code for the rhythmicity of this attempt was entered into columns 65-66, and a code for heaviness of tapping was entered into column 67. The score for Task 4, the second (last) attempt, was entered into columns 52-54 on the same card, along with a rhythmicity code in column 68-69 and a heaviness code in column 70.

- Task 2. The reproduction of rhythmic patterns. The child attempted to reproduce the rhythm that the examiner tapped out of his sight. This task is made up of 21, but it is terminated after four consecutive failures, except that 12 patterns are always presented. The scores are: the number of patterns correctly reproduced in the entire test, maximum score 21, and the number of correct patterns correctly reproduced among the first 12 items, maximum score 12. The two scores are entered into columns 55-56 and 55-58, respectively, on Card 1, Session 4. The number of the last test item is entered into column 59-60 on the same card.

- Task 3. Understanding of notation of rhythmic patterns and tapping patterns from the notation. The child views notation such as ** to indicate two quick taps and *   * to indicate two well-separated taps. Only if the child seems to understand the practice items does he continue on to tap 12 patterns from notation. A code for level of understanding of notation is entered into column 61, and quality codes for the actual tapping are entered into columns 62, 63, and 64 on Card 1, Session 11.
Evaluation of Handwriting
 Constructed by K. Lamb
 Administered in Session 8 (Fall 1963, Grade 3)
 Raw data are in data box #21 with additional worksheets in box #32

The child’s handwriting on the Sentence Completion task (described under Language Measures) was evaluated on a 5-point scale. The scale ranged from 1 (low quality) to 5 (high quality). The considerations related to quality included general legibility, general neatness, and esthetic value. In some cases definiteness of line or confidence of stroke and quantity were considered. The evaluator tried to avoid consideration of spelling, grammar, syntax, and vocabulary in the classification of the writing samples. There is a reliability study in the folder in Box #1 that contains the test information.

This rating is entered into column 66 on card 1, session 8.
Adequacy of the Speech Mechanism
Administered in Session 3 (Spring 1961, Kindergarten)
Raw data are in data box #7

A screening of the speech mechanism included examination of the lips, tongue, and teeth, along with repetition of syllables /pa/, /ta/, and /ka/ (not timed, but evaluated for adequacy). One section describes independence of tongue movement (which is an issue related to both maturity and neurological damage).

No scores were entered into the database for the oral mechanism because the scores were categorical in nature.

References


