

IOWA PERSPECTIVE

News of Programs for Emotionally Disabled and Chronically Disruptive Students
Iowa Department of Public Instruction

December, 1979

Evaluating and Teaching Reading to "Irregular" Kids

Dr. Clay M. Starlin
Educational Consultant
Eugene, Oregon

.....
Paper Outline

INTRODUCTION

Proficiency
Learning Measurement

WORD PRONUNCIATION

What Is Our Outcome Goal?
What Are the Prerequisites to Learning to Read?
What Constitutes Word Pronunciation Proficiency?
What Procedures and Materials Shall We Use to Evaluate Reading Performance?
How Do We Determine Instructional Placement?
What Are the Most Effective Teaching Tactics?
Appropriate Slicing of Curriculum
Demonstration (Show)
Direct Practice
Natural Consequences

READING COMPREHENSION

What Are the Outcome Goals of Reading Comprehension?
What Are the Prerequisites to Reading Comprehension?
What Constitutes Reading Comprehension Proficiency?
What Procedures and Materials Should We Use to Evaluate Reading Comprehension Performance?
How Do We Determine Instructional Placement?
What Are the Most Effective Teaching Tactics?

SUMMARY
.....

Introduction

This article represents our most recent knowledge in how to apply the principles of learning to the teaching and evaluation of reading. The information is presented in a simplified manner. However, this simplicity should not be confused with a lack of sophistication. One of the hallmarks of science is that the problems under investigation become clearer, and appear more simplistic, as we move closer to resolving the problems.

The field research that has taken place over the last ten years in the area of reading has identified the essential (versus spurious) components involved in efficiently and effectively teaching and evaluating reading. Although we are particularly concerned with handicapped children, the information presented is applicable to students in all categories (e.g., "retarded," "average," "gifted") and to all ages (i.e., preschool through adult).

I am sure that a number of the concepts presented will conflict with your present beliefs and practices. I strongly urge you to *neither accept nor reject* the information out of hand. Instead, try out the ideas with an open mind, following your own common sense, then drawing your own conclusions.

This article emphasizes a measurement focus toward teaching rather than a method focus. We are not presenting a "new reading method" to be compared with other reading methods. What is presented is a statement of: 1) what is essential to teach another person to read, regardless of the material used and 2) how to precisely evaluate student performance and thus evaluate teaching effectiveness.

There are two central measurement concepts, **proficiency** and **learning measurement**, which are interwoven into each segment of this article. Consequently, it should prove helpful to briefly discuss each of these concepts at the outset.

In This Issue:

**"Evaluating and Teaching Reading to
'Irregular' Kids" by Clay M. Starlin**

**"Academic Assessment in the Identification
of Emotionally Disabled Pupils" by
Patricia Rootes**

Proficiency

The entire decision making process, as it relates to teaching and evaluation, hinges on how proficiency is defined. The lack of agreement in this area has been the biggest single factor in maintaining much of the confusion in the reading area.

What does it mean to be a good 4th grade reader? What is the difference between a good and poor comprehender? What constitutes adequate word recognition skills?

Proficiency means to be skilled, to perform with ease and accuracy. There is no such thing as having different levels of proficiency. Certainly there are different levels of performance, but either a student has achieved a *standard* of proficiency, or he/she is non-proficient.

Because it is a standard, it remains the same regardless of the age of the student or his/her label. These standards are directly analogous to many of the standard (or normal) limits we find in medicine (e.g., 98.6).

There are only two dimensions to academic proficiency. One is **accuracy**, the relationship of the number of correct responses to the number of incorrect responses. The other dimension is **fluency**, the number of total responses made in a standard time period.

We look at both fluency and accuracy because we are concerned with the *inaccurate student* and the *slow performing student*.

These two factors provide us with four possible performance patterns:

1. fluent accurate students (proficient)
2. fluent inaccurate students
3. slow accurate students
4. slow inaccurate students

You can probably write down names of students you have taught next to each of these patterns. Obviously, number 1 is most desirable and number 4 is least desirable. Accuracy and fluency are equally important and without both, a student is not proficient.

Initially, the concern for fluency, and therefore time, seems somewhat foreign since we were taught that: accuracy alone = proficiency (e.g., 90% accuracy pass to a new level). Just as we keep track of accuracy information for students who have accuracy problems, we need to keep track of fluency information for students who have fluency problems, such as: slow reading, failure to complete assignments and needing additional time on tests.

To measure accuracy, we **count** the number of correct and error responses. To measure fluency, we monitor **time** for a standard interval (e.g., 1 minute, 2 minutes, 5 minutes). The measurement of the fluency area involves the student's fluidness of performance; it is not a race or a speed test. We are not timing the student; we are looking at the student's performance during a standard time period.

The fluency factor has recently increased in significance because it appears to be directly involved with the retention of information. That is, when things are done fluently and accurately versus just accurately, we still know the information in a week, in a month, after summer break.

Maintaining **standard** accuracy and fluency criteria means that the slowest learning students will achieve proficiency on fewer skills and concepts. A slow learning student may spend 13 years in school and achieve proficiency in skills equivalent to a fifth grade level. This is 13 years of effort for five "traditionally defined" years of growth. However, this student is **proficient** at the fifth grade level and is, therefore, as competent at a fifth grade level as any student in the school. He or she is competitive for any job that requires fifth grade level skills. This is a very different process than socially promoting students through school, exposing them to many areas, but having them achieve proficiency in very few of them.

When specific proficiency standards are stated, in the remainder of the article, these will be in terms of a correct and error standard (accuracy) over time (fluency).

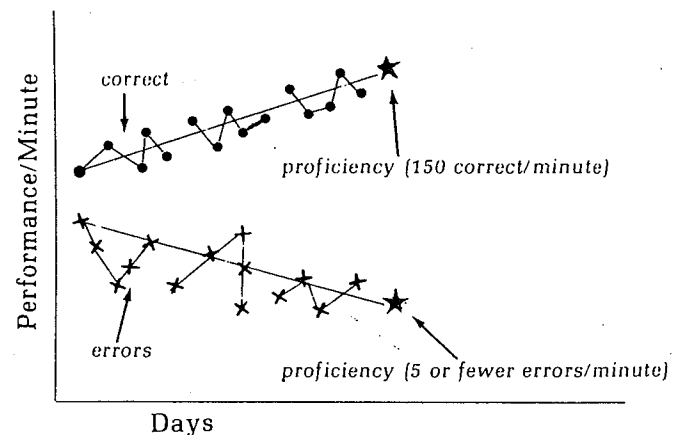
Learning Measurement

Most past and present evaluation procedures have been measures of student performance at a certain point in time (e.g., achievement tests, diagnostic tests, unit tests, criterion-referenced tests). To obtain a measure of learning, it is necessary to take *repeated* measures of performance over a period of weeks.

It is obviously not feasible to give an achievement test or a unit test each day for two weeks in order to watch a **change in student performance** (i.e., learning). However, it is very feasible to sample a student's performance for one, two or three minutes each day.

The measurement of learning as used in this article will always involve taking these short performance samples each day as a student moves from a point of non-proficiency to a point of proficiency.

Graphically, such change in performance (learning) might look like the following:



Each dot and "x" combination represents the correct and error performance for one day's performance sample. In this example it took three weeks (15 school days) for the student to move from a point of non-proficiency to proficiency.

A standard chart that we use for the purposes of representing student learning is shown in Figure 1. (For more information regarding the chart see *Teaching Exceptional Children*, spring 1971). By maintaining such learning information it is possible to change a student's instructional program if his or her learning is not rapid enough.

DAILY BEHAVIOR CHART (DC-9EN)
 8 CYCLE-140 DAYS (20 WKS.)
 BEHAVIOR RESEARCH CO.
 BOX 3351-KANSAS CITY, KANS. 66103



CALENDAR WEEKS

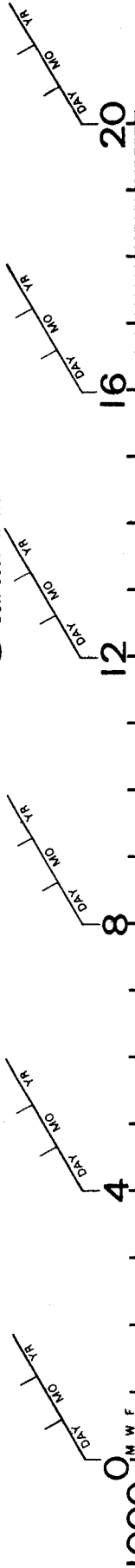
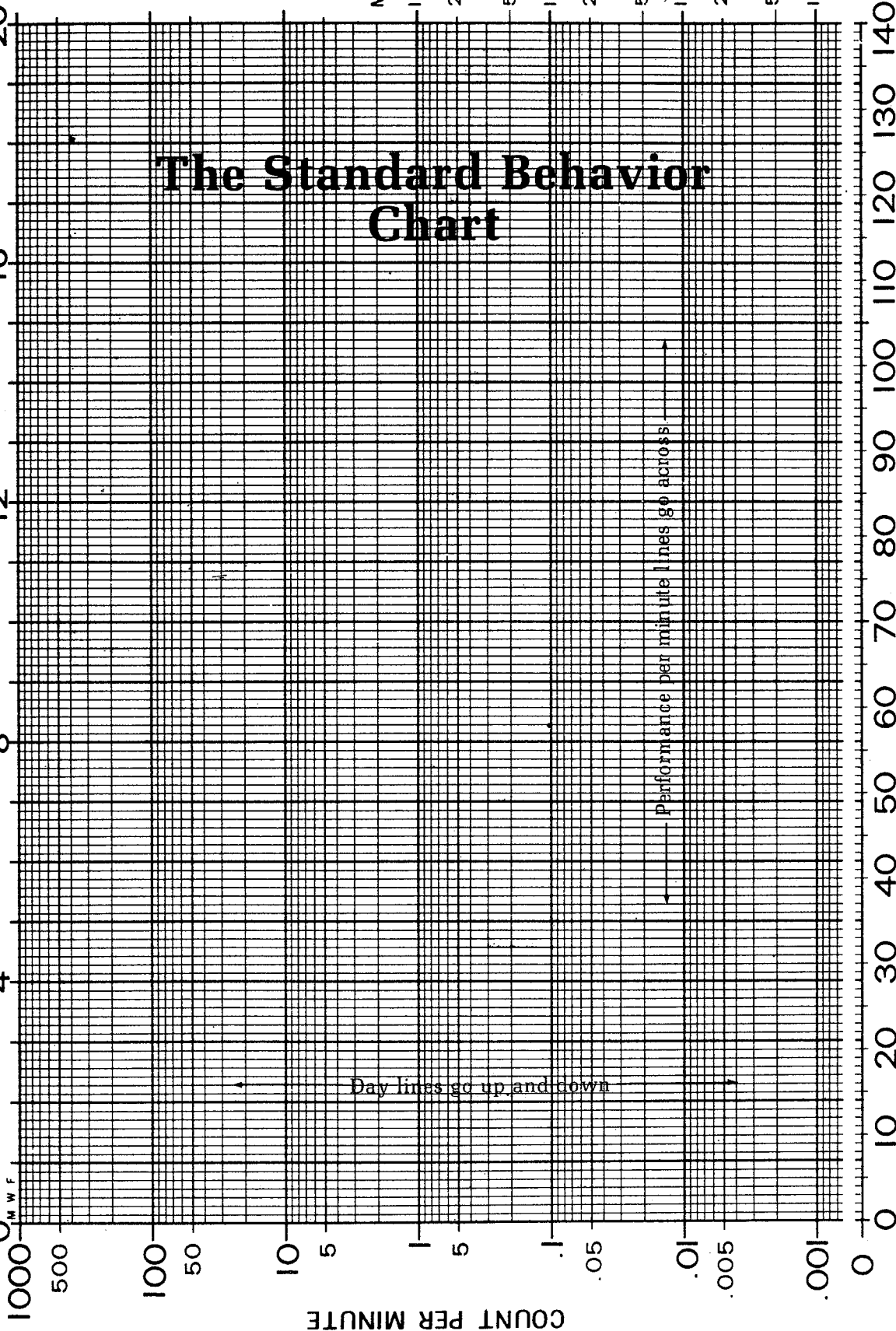


FIGURE 1
 MIN HRS
 COUNTING PERIOD FLOORS

The Standard Behavior Chart



SUCCESSIVE CALENDAR DAYS

SUPERVISOR	ADVISER	MANAGER	BEHAVIOR	AGE	LABEL	COUNTED
DEPOSITOR	AGENCY	TIMER	COUNTER	CHARTER		

A measure of learning complements the proficiency concept in the decision making process. Knowing precisely where we are going (proficiency) and having a means to monitor progress toward that goal (a measure of learning) allows us to become more highly skilled teachers.

The remainder of the article looks in depth at the word pronunciation area and briefly at the comprehension area.

Word Pronunciation

What Is Our Outcome Goal?

The outcome goal of word pronunciation instruction is to teach students to accurately and fluently pronounce (orally and then silently)¹ a large number (i.e., 10,000-60,000) of printed words.

Our word pronunciation outcome goal is not to teach students:

1. to sound out words
2. to learn letter names
3. to learn sound-symbol relationships
4. to blend sounds together
5. to identify syllables in words
6. to underline silent letters, or vowels in words ad infinitum

All of these items are instructional activities (not outcome goals) which may or may not be helpful in teaching students to pronounce words. In fact, most of these items are making learning to read more difficult rather than less so.

What is crucial to remember while reading this article, as well as in your own teaching of reading, is that our teaching and evaluation focus is on the pronunciation of total words. It is necessary to judge the effectiveness of all our teaching by the effect it has on learning to pronounce words (not attack words, recognize words, identify words, etc.).

What Are the Prerequisites to Learning to Read?

The intellectual capability in learning to "hear" words is parallel to that involved in learning to "see" words. Consequently, if a child has learned to speak, he/she is capable of learning to read and without traditional "reading readiness" instruction.²

Following is a checklist of the prerequisite criteria that a student should meet prior to beginning reading instruction. If we can place a check mark next to each of these items, a student is ready to read.

- 1. is proficient in speech and language
- 2. has adequate hearing and vision (with corrections or aids if necessary)
- 3. is motivated (usually not a problem, most students are anxious to learn to read by school-age)

¹To be sure that a student is proficiently pronouncing words accurately and fluently, initially emphasize oral reading. Once proficiency is established with a set of words, emphasize silent reading from that point on.

²Certainly pre-school children who have limited speech and/or language skills, upon entering school, will require a speech and/or language program before reading instruction begins.

- 4. the initial words to be introduced in reading are part of the student's speaking vocabulary (most students entering kindergarten, even many who would be considered moderately handicapped, will have a speaking vocabulary of around 6,000 words)
- 5. can demonstrate understanding that printed letters in different combinations represent spoken words
- 6. knows letter names

Literally, letter names should not be considered a prerequisite to learning to pronounce words as units. If the student understands criteria number five, it is not necessary that he/she knows the names of the letters. However, by providing names for the 26 funny squiggles that make up the different words: the student and teacher can talk about the letters, the student can recognize that these different letters occur over and over in different words, and the student should be less confused--as when students know everyone's name in the classroom compared to the first day of class when they do not know anyone's name.

It is doubtful whether the "readiness" activities that follow, which are commonly part of many reading readiness programs, have a direct relationship to learning to read better. As a matter of fact, some of these activities may make the beginning reading process more confusing.

1. sound-symbol relations and blending
2. visual discrimination activities
3. auditory discrimination activities
4. visual-motor activities
5. visual memory activities
6. auditory memory activities

Following are a few reading readiness instructional ideas that can be particularly helpful.

1. Read to the child often (at both home and school) and make sure the child can see the print. While reading, point to the words in the book moving your finger in a slow left to right direction.
2. Have students practice saying words from word/picture cards or worksheets.
3. Use situational writing (e.g., when saying "good morning," write it on the board).
4. Point to signs, labels, etc. in the environment and read them out loud.
5. Use book-tapes where the child can follow along in a book as a story is told on the tape.
6. Have printed material (books, magazines, newspapers) accessible in all parts of home and school.

What Constitutes Word Pronunciation Proficiency?

Our goal is to have students learn to pronounce words. However, with any given material (e.g., basal readers, textbooks, word sheets, newspapers, library books), at what point is a student proficient and ready to move on to new material?

In Table 1 on page five are the proficiency standards we use in the word pronunciation area.

Table 1

Pinpoint	Proficiency Standard
reads isolated words from a sheet	80-120 correct/min. 2 or fewer errors/min.
reads words in isolated phrases or sentences from a sheet	150-250 correct/min. 5 or fewer errors/min.
reads words orally in-context	150-250 correct/min. 5 or fewer errors/min.
reads words silently in-context	350-900 correct/min. 5 or fewer errors/min.

The best way to get some comfort and confidence with these standards is to pick up a textbook, a newspaper, etc. and read each of them (orally and silently) for one minute at a comfortable pace. Count up the number of correct and error words you read during each minute. If you are proficient, by definition you will fall within these proficiency ranges.

The proficiency standards are in terms of a range because reading rate will vary depending on: the complexity of the vocabulary, the familiarity with the content, the purpose of the reading, etc. The low end of the correct range represents a minimum standard, regardless of the material, and the high end indicates where accuracy will begin to break down because performance is too rapid.

Concern is sometimes expressed because the same standards are used for "normal" adults through pre-schoolers. If the basic teaching tactics (discussed later in this section) are employed, all students can achieve the same standards. Looking at the normal speaking fluencies of adults versus pre-schoolers demonstrates why this is feasible. Adults and pre-schoolers talk within approximately the same fluency range (i.e., 150-250 words per minute), which is the same range identified for oral reading proficiency. Consequently, pre-schoolers have the **potential** to read as fluently as they talk.

These proficiency standards for the first time have given us a quantitative point that defines when a student has established words in his/her long-term memory. This means that when we leave one set of words to work on a new set, we can be confident the student will remember the previous words.

A few final points before leaving the proficiency area. (1) The reason for having a student read orally is to substantiate that she/he can in fact pronounce the words proficiently (accurately and fluently). Once this has been substantiated, the focus should shift to silent reading. (2) The fluency ranges are lower for the isolated word sheets because it is not possible to move as smoothly through this material as through in-context material. (3) For those persons more accustomed to an "accuracy alone" mastery criteria, note that all of the proficiency standards are above a 96% accuracy standard.

What Procedures and Materials Shall We Use to Evaluate Reading Performance?

The focus of evaluation is on the student's ability to pronounce words, not on evaluating those institutional activities (e.g., marking syllables, blending) mentioned earlier in the section.

The materials to use for evaluation are the same materials used for teaching reading in the classroom. No other outside test or materials are necessary. Following are the steps to follow in conducting an oral reading evaluation sample regardless of the material (e.g., word sheet, newspaper, textbook, library book).

1. Identify persons to help record (e.g., proficient peers, older students, aides, parent helpers).
2. Use duplicate materials. One for the student to read from and one covered with a sheet of mylar or plastic film for the recorder to follow along on and mark incorrect responses.
3. Tell the student to skip any words he or she does not know.
4. Sample performance for one minute.
5. Ask the student to "please begin;" start the one-minute timing. (Use an accurate timer, preferably with an auditory signal).
6. Place a slash mark in your copy of the material where you started the timing.
7. As the student reads, place a check mark over any errors (i.e., mispronunciations and words skipped).
8. When the one-minute sample ends, say "please stop," place a slash mark on your copy to indicate where the timing ended and say "thank you." (If a sample finishes in the middle of a page or story, place a slash at this point and allow the student to finish the page or story.)
9. Count the total words covered during the one-minute timing (i.e., words between the two slashes). Count up words in materials that are read frequently, and place the counts down the right-hand margin to save re-counting every time a sheet or page is read.³
10. Count up the total number of check-marked errors (i.e., mispronunciations and words skipped) made during the one-minute timing.
11. If you desire a record of the errors, copy these on a separate sheet.
12. Subtract the number of errors from the total words covered to get the number correct (total words - errors = correct words).
13. Chart the correct and error scores on the standard chart (Figure 1). Use a (.) for correct and an (x) for errors on the appropriate day line. (To evaluate how a student is learning (i.e., moving from non-proficiency to proficiency) we merely take repeated samples each day and represent each on the standard chart.)

Silent Reading. Any need to evaluate silent reading performance will usually relate to monitoring silent reading fluency versus accuracy. We should have already substantiated reading accuracy through oral samples.

.....
³Whenever possible the student should carry out step 9.
 13.

The material used in silent reading evaluation should also be classroom material. The procedures for recording silent reading performance are the same as for oral reading, except there is not a need for duplicate material or a separate recorder.

An auditory signal timer will enable the student to read for a minute and place a start and stop slash in the material where the timer indicated the minute started and ended. The student can also mark with a pencil any unknown words. This may be particularly useful in material introducing new concepts. The student should then compute the correct and error frequencies and chart them.

It is not necessary to maintain a detailed error analysis record as is done in most reading diagnostic tests for the following reasons:

1. If too many errors exist (i.e., the student is not learning) it is better to slice back to material with fewer errors rather than stay at a level and develop an elaborate error remediation program (i.e., build a new foundation versus patch up an old one).
2. Reading fluency (the total words per minute) provides an index of those error categories which interfere with fluency (i.e., self corrections, repetitions and external or internal sounding out). The more of these errors, the slower the reader; the fewer of these, the more fluent the reader.
3. Often the diagnostic process identifies and then implies needed remediation for medial vowel problems, endings, beginning syllables, etc. This process focuses on the components of word pronunciation rather than on the outcome goal of the entire word. By maintaining a focus on the whole word and using the basic teaching tactics (discussed later in the section), students learn error words faster.

In summary, the materials that are available in your classroom should be used to evaluate word pronunciation skills. It is not necessary for purposes of classroom decision making to use any type of test (i.e., achievement, diagnostic, home made, factory made). By following the recording steps outlined and using your classroom materials, you will have information that will translate directly into instructional placement.

How Do We Determine Instructional Placement?

An instructional placement decision involves determining from what material(s) a student will learn best. Remember, we may wish to have a student use more than one reading material (e.g., library book, basal reader, textbook, newspaper) at the same time.

Since the primary concern is word pronunciation skills, the focus of the instructional placement section is in the oral reading area. A student should be encouraged to read silently in those materials in which she or he has achieved word pronunciation proficiency.

The first step in the instructional placement process is to identify those materials that could be used in your classroom setting. From these materials develop an informal reading inventory (IRI). This IRI might take a form such as:

1. a passage from the beginning, middle and end of

- each basal reader
2. passages from selected library books
3. passages from selected sections of different optional textbooks
4. passages from different newspapers or magazines, or certain sections of the newspapers or magazines

To facilitate ease and accuracy of recording, these passages should meet the following criteria:

1. be at least 300 words in length.
2. be a running narrative versus poetry, dialogue, etc.
3. have a cumulative word count for each line, down the right hand margin.

After the IRI passages have been selected, have the student read for one minute each selected passage until an instructional level is found. (The recording procedures described under "What Procedures and Materials Shall We Use?" should be followed during the instructional placement process.)

The guides for instructional placement are presented in Table 2. There are three different levels represented: 1) at the **proficiency level** the student knows the material and should move on to new skills or concepts, 2) at the **instructional level** the student is not proficient and additional learning is required but the skills or concepts are not too difficult, 3) at the **frustration level** the skills or concepts are too difficult for rapid learning to occur.

Table 2

Level	Performance Criteria	Action
Proficient:	150-250 words read correctly per minute and 5 or fewer incorrect per minute	<u>Move</u> (to new level)
Instructional:	70-149 words read correctly per minute and/or 6-10 incorrect per minute	<u>Stay</u> (at this level as an instructional level)
Frustration:	0-69 words read correctly per minute and/or 11 or more incorrect per minute	<u>Slice</u> (to a lower level)

In making a decision about where the performance on any given passage should fall, begin decision making by checking the student's performance against the frustration level. If the performance falls into the correct **and/or** the incorrect range, **slice** to a lower level. If the performance does not fall within the frustration range, check it against the instructional level. **Stay** at the instructional level if the performance falls into the correct **and/or** incorrect range. If performance does not fall into the instructional range, the student is proficient and should **move** to a new level.

These criteria are guides and not rigid standards. The classroom teacher must make the final decision. It is important to remember that a student must have a **sizable number of errors** and be relatively slow in fluency of performance when he/she first begins

working at a level. Otherwise, there is literally no room for **learning**.

Ideally, it would be desirable to obtain a measure of learning on each passage versus a single performance sample. This would tell us in which material(s) the student learned best. However, this would require seven to nine days of information for each passage and in most situations this is not practical.

After selecting material for instruction, we should obtain a daily sample and represent it on the standard chart in Figure 1 to be assured that learning is in fact taking place.

What Are the Most Effective Teaching Tactics?

The student is placed instructionally, the proficiency standards are established, and we know how to monitor progress toward proficiency. The next logical question is what to do instructionally to ensure the student will learn.

Historically, word pronunciation instruction has had an analytical emphasis (even the old sight emphasis materials eventually introduced analytical procedures). This analytical focus is seen in such activities as: detailed error analysis, sound-symbol relationship instruction, syllabication instruction.

Since the outcome goal in the word pronunciation area is to pronounce words, students should be practicing pronouncing words not learning how to analyze them. Students should learn to read words in exactly the same way that they learn to speak them--through being repeatedly exposed to the **word as a unit** and then practicing the pronunciation of that word until proficiency is achieved.

If a student can learn to auditorily discriminate thousands of words without analytical instruction, then reproduce these words while speaking, he/she certainly can visually discriminate these same words without analytical instruction.

The fundamental variable which determines how quickly students learn new words, regardless of the instructional approach (e.g., phonics, linguistics, language experience, sight), is how many times they see the word and can practice saying it. Unfortunately, analytical approaches have not merely been neutral but have usually served to slow down the learning and subsequent retention of words.

The analytical approaches have emphasized that accuracy is paramount and that fluency matters very little. For this reason many children are tense, slow, perfectionistic, overcautious and non-spontaneous. (The fear of being wrong! Feel familiar? Most of us have also learned this.)

We need to calm down about errors, stop requiring perfect performance. Let students work on materials where they have a good many errors, treat errors as positive "opportunities for learning" rather than as appalling ignorance.

Many supplemental teaching procedures (e.g., games, teaching machines, workbook activities, group reading) are also slowing down learning because of the same overemphasis on accuracy.

So what is left? How should we be teaching reading?

We have found the following four teaching tactics particularly helpful in creating rapid learning.

- ①. Appropriate slicing of curriculum +
- ②. Demonstrate (show) +
- ③. Direct practice +
- ④. Natural consequences =

Most rapid learning

How successful any given reading program is will depend on: 1) how consistently the program employs these teaching tactics and 2) how well the program maintains a focus on the outcome goal of "pronouncing words." None of these four teaching tactics is new, but the consistent emphasis we place on them is novel. It is important to remember that they are universal and applicable to all ages and all curriculum areas.

Therefore in its most generic sense, a reading program should involve: 1) finding the appropriate slice of curriculum (i.e., one in which the student can learn) through the instructional placement process, 2) providing whatever instruction and demonstration is necessary (i.e., telling students how to pronounce words), 3) allowing the student to directly practice pronouncing the words each day and 4) providing feedback regarding progress.

Specific examples under each of these teaching tactics will be provided in the remainder of the teaching tactic section.

Appropriate Slicing of Curriculum

This concept involves giving students curriculum with more or different concepts if they are proficient on a level, and curriculum with fewer concepts if they are frustrated on a level.

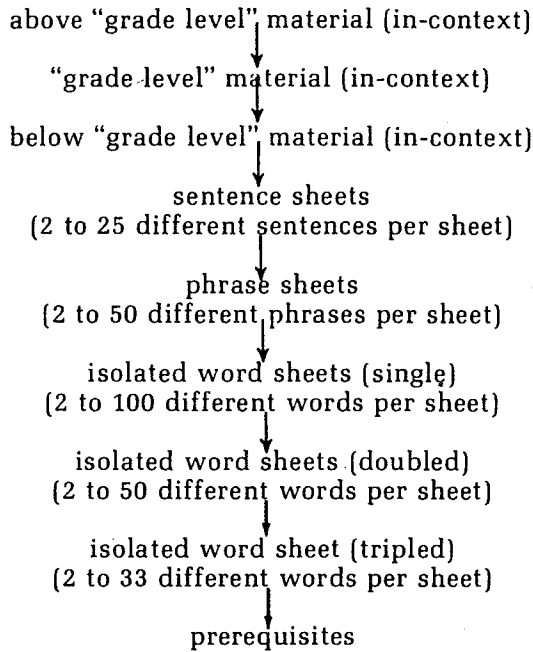
If we give a student 20 vocabulary definitions to learn in a week and he/she learns them in a day, give him/her 50 per week. If he/she learns 50 in a day, give him/her 100 a week.

If a student has difficulty with 20 new sight words per week, slice the list to 15 or 10. If this is still too difficult, try five words, or even two.

Instructional placement means finding the correct slice of curriculum that will truly require learning but will also enable each student to achieve success relatively quickly (e.g., every two weeks). The beautiful thing about the slicing concept is that two students can be learning at exactly the same rate, yet one is learning five concepts in two weeks while the other is learning 100 in two weeks. However, the effort was equal for both, and hopefully, so was the pride of accomplishment.

One of the first things to think of, if the student is either bored or frustrated, is whether to increase the slice of curriculum or slice it thinner.

A list of some different reading materials follows with the most complex at the top and the least complex at the bottom. Moving down these levels provides a student a thinner or less complex slice of curriculum and moving up the levels provides a thicker or more complex slice of curriculum.



If a student remains at a frustration level (based on the instructional placement guides mentioned earlier) in the lowest in-context material, slice to the sentence, phrase and/or word sheets until it is possible to move back into in-context material.

These sheets are made up by merely filling up an 8 1/2 x 11 page with sentences, phrases or words. For instance, a standard isolated word sheet will have 100 words on it. Depending on the slice the student can handle, there could be 100 different words or two different words repeated 50 times each.

For some students it is helpful to have the words on a sheet doubled (e.g., jump/jump/sister/sister, etc.) or tripled to provide more concentrated practice.

Of course a student may be working on more than one level at the same time. A fifth grade student may be reading in-context at an instructional level in a third grade reader and practicing his/her error words and/or new words on an isolated word sheet.

Notice that all the way through the different slicing levels, to the prerequisite level, a word pronunciation focus is maintained. There is not a diversion into an error analysis program.

Demonstration (Show)

Often our verbal explanations are too abstract. Consequently, it is essential to **show** students what to do and sometimes guide them through the activity a number of times before letting them practice on their own.

By doing a good job of instructional placement (placing a student on an appropriate slice of curriculum), the need for elaborate explanations and demonstrations is reduced. Often we are required to provide elaborate and repeated explanations and demonstrations because the curriculum placement is too difficult.

The basic demonstration necessary in word pronunciation is correctly pronouncing new words. Demonstrating fluent, accurate reading, on material a student is working on, will also provide a model for her/him to follow.

Direct Practice

Direct practice refers to practicing the exact skill(s) or concept(s) to be learned. (i.e., outcome goals). **Indirect practice** involves practicing activities related to the skill or concept, but it does not involve practicing the actual skill(s) or concept(s).

In the word pronunciation area, this means working in materials which require pronouncing words versus fill-in or matching activities in workbooks, playing academic games, watching filmstrips, etc. While working on the word pronunciation areas, allow at least 45 minutes a day for a student to practice reading. Following are listed some of the different practice options to employ:

1. Re-read material (e.g., word sheets, pages of books, stories) in a timed format.
2. Encourage students to think of (visualize) the words they are learning--inner practice.
3. Tape record selection at a proficiency level and have students read in unison with the tape.
4. Have a "practice sign-off card" for students to have signed during the week, each time they read to a person outside the classroom.
5. Transfer practice (e.g., if a student learns a word in one textbook, have him/her practice finding and saying the word in a half-dozen other sources).
6. Use pacing or flashing devices that can be set at a proficiency level (e.g., language master, controlled reader).
7. After achieving oral reading proficiency on in-context material, have students practice reading the material silently.
8. If students learn to mark their errors during practice sessions, have them practice these words on isolated word, phrase or sentence sheets.

Direct repeated practice is the one procedure that is essential for learning. Those things we do proficiently are things we have practiced; many times to the point where the skill is automatic and there is no longer a need to consciously think about doing it. This automatic level is what to strive for in building reading vocabulary.

Natural Consequences

Information regarding use of reward and punishment procedures has been part of classroom knowledge for a number of years. The difference in emphasis suggested here is to concentrate on those rewarding and punishing events that are a natural outgrowth of how the student behaves rather than artificially devised consequences. For example, the natural reward for performing well is to see a numerical gain in correct performance and/or a numerical loss in error performance. By doing a good job in placing a student, he/she should see improvements nearly everyday until he/she achieves proficiency.

Following are a few specific reward and punishment ideas relating to the word pronunciation area:

Reward Ideas

1. For students not reading in-context, use "reading in a book" as a reward for achieving proficiency on word, phrase or sentence sheets.
2. Have students identify words in library books, newspapers, recipes, directions, etc. that they want to learn. Provide reward for mastering (use proficiency criteria) these words on their own.
3. Have a reading party! Students bring their own material to read. Have refreshments. Buy, sell and/or trade books; have dramatic readings, free silent reading, etc.
4. Allow students to skip a portion of a book for reading a designated section proficiently.
5. Show improvement on standard chart.
6. Let students decide which stories to read.
7. Take pictures of students while reading.
8. When students achieve proficiency, make an audio tape of their selections.

Punishment Ideas

1. Withdraw privilege of reading.
2. Show lack of improvement on chart.

In summary, the instructional emphasis being suggested is similar to how the old "sight emphasis" programs introduced and practiced new words (prior to when these programs began phonics instruction). However, there are two crucial differences: 1) The sight emphasis programs did not define proficiency in terms of accuracy and fluency and consequently students often did not get enough practice on new words to ensure long-term retention. 2) The programs did not fully grasp how thinly to slice material to find an instructional level for the slowest learning students.

This section has diverged from the measurement focus by recommending specific teaching tactics. However, if we follow these teaching tactics, we can teach all students to read (who meet the readiness criteria) regardless of the curriculum being used.

The ultimate proof will rest with our measures of learning. If no learning is occurring in the existing instructional program, then regardless of the teaching tactics or materials being used, some changes need to be made.

Reading Comprehension

Space does not permit an elaborate discussion of the comprehension area. However, not a great deal of space is really needed. As much as the area of "reading" comprehension is discussed, it is seldom, if ever, an isolated problem.

First of all it is somewhat deceptive to say that the goal of reading instruction is comprehension. This is certainly true but it is also the goal of nearly everything else we do in school.

Secondly, it is possible to teach a student the skills of comprehension (or thinking) using stimulus procedures other than print (e.g. still or motion pictures, recalling an experience, listening.)

Very few students, who have word pronunciation proficiency in specific reading material, will have difficulty in comprehending this material. The vast majority of students who are referred for "reading" comprehension problems do not understand what they read because they lack fluency and/or accuracy in word pronunciation skills.

Those students who truly have a reading comprehension problem will have a generalized comprehension (thinking) problem that can be evaluated through the other stimulus procedures equally as well as through print.

Certainly the comprehension (thinking skills) area is fundamental to the entire educational process. It is vital that we learn to teach and evaluate in this area, particularly for students who have thinking skill problems. However, bear in mind that comprehension is not a concept exclusively or uniquely tied to reading.

In an abbreviated form, the remainder of this section will cover the same questions that were dealt with in the word pronunciation section. By reflecting on the word pronunciation discussion you should be able to follow this abbreviated format.

What Are the Outcome Goals of Reading Comprehension?

If we should be teaching the same skills in school that students will need in the real world, we are on the wrong track as it relates to reading comprehension. Characteristically, the skill students perform in school is "answering oral or written questions about material read". When is the last time you did that in your day to day activities?

The reading comprehension skills we do use in daily life which should be emphasized in school are:

1. summarizing information in your own words (e.g. talking with a friend about a novel, a newspaper editorial, a magazine article)
2. following written directions (e.g. recipes, common forms, repairing or assembling directions)
3. asking questions (e.g. Before we pick out a novel we may ask--What is it about? What else has the author written? I wonder if I will like this book?)

The skill that is most frequently used in daily living is "summarizing information in your own words". Consequently, most school time should be spent on this skill.

What Are the Prerequisites to Reading Comprehension?

1. Proficient speech and language
2. Proficient word pronunciation skills⁴

.....
⁴It is important to remember that we can and should be working on listening, free-recall and picture comprehension until a student achieves word pronunciation proficiency in some reading material.

What Constitutes Reading Comprehension Proficiency?

Table 3

Pinpoint	Proficiency Standard
Summarizes information in your own words	20-30 correct pieces of information/minute 2 or fewer incorrect pieces of information/min.
Follows written directions	5-30 correct/minute 2 or fewer incorrect/min.
Asks questions	10-20 correct/minute 2 or fewer incorrect/min.

What Procedures and Materials Should We Use to Evaluate Reading Comprehension Performance?

Summarize information in your own words. After students have finished reading a particular selection they should "summarize in their own words" what they read: to the teacher, a partner or another classroom helper. Ideally the summary should be one minute (to eliminate necessity for dividing) but two or three minute summaries may be necessary for longer reading assignments.

The student should talk at a normal conversational pace and each time a correct (or incorrect) piece of information is stated, the recorder should make a correct or incorrect tally. As in the word pronunciation area, this correct and error information can then be represented graphically on the chart in Figure 1.

Follow written directions. Ideally, the material used here should come from the real world (e.g. forms, policies, phone books, recipes, building and assembling directions).

To evaluate performance in these materials, merely establish a certain time period for the student to perform (e.g. 10 minutes) and count up the number of directions followed correctly and incorrectly. Dividing the correct and error counts by the time segment provides the standard "performance per minute" unit to chart, and compare to the proficiency standards.

Ask questions. This can be done before and/or after reading a selection. This pinpoint also requires a recorder to keep track of the correct and incorrect questions asked. A one minute sample time should be sufficient for this area.

How Do We Determine Instructional Placement?

The guides in Table 4 can be used for instructional placement in the "summarizing information in your own words" area.

There are not similar guides that have been tested for the "following directions" and "asking questions" areas. However, you can approximate these guides by using the proficiency standards and working down from these as was done in the "summarizing information" area.

Table 4

Level	Performance Criteria	Action
Proficient:	20-30 pieces of information stated correctly per minute <u>and</u> 2 or fewer incorrect per minute	<u>Move</u> (to new material)
Instructional:	10-19 pieces of information stated incorrectly per minute <u>and/or</u> 3-6 incorrect per minute	<u>Stay</u> (With this material as an instructional level)
Frustration:	0-9 pieces of information stated correctly per minute <u>and/or</u> 7 or more incorrect per minute	<u>Slice</u> (to find instructional level)

What Are the Most Effective Teaching Tactics?

The four basic teaching tactics are universal so they stay the same even though the curriculum area changes. Consequently, the best way to ensure learning is to **demonstrate** desired performance in the various comprehension skills; provide students with the opportunity to **directly practice** "summarizing information in their own words," "following written directions" and "asking questions;" provide **positive feedback** about progress and **slice** back if learning is not occurring.

Summary

Although it is a slight simplification, I think it is useful to think of the reading area as constituting two basic goals: 1) pronouncing words (orally and then silently) and 2) summarizing information read in your own words. Everything else we do under the guise of reading instruction must be evaluated in terms of its effect on these basic goals.

As long as we follow the proficiency standards, maintain up-to-date charts of student learning and employ the four basic teaching tactics, we will be successful in teaching students to read regardless of the curriculum being used. However, the more we move away from curriculum and evaluation procedures that emphasize an analytical approach, the more rapidly learning will occur.

It was not possible to go into detail on how to organize a classroom to implement the concepts presented. However, I do not believe that a printed format is the best forum in which to provide detail. I would suggest getting involved in a workshop setting where you can: see "demonstrations," "practice," "slice" when necessary, and "see your own progress".

Every student who has learned to speak has the ability to learn to read and understand what she/he has read. If we work together, at all levels of the educational enterprise, I am confident we can create one reader for every talker. It may never be easy to mix all the right ingredients to make this a reality. However, by employing the concepts presented here, I hope you will find this goal more easily attained.